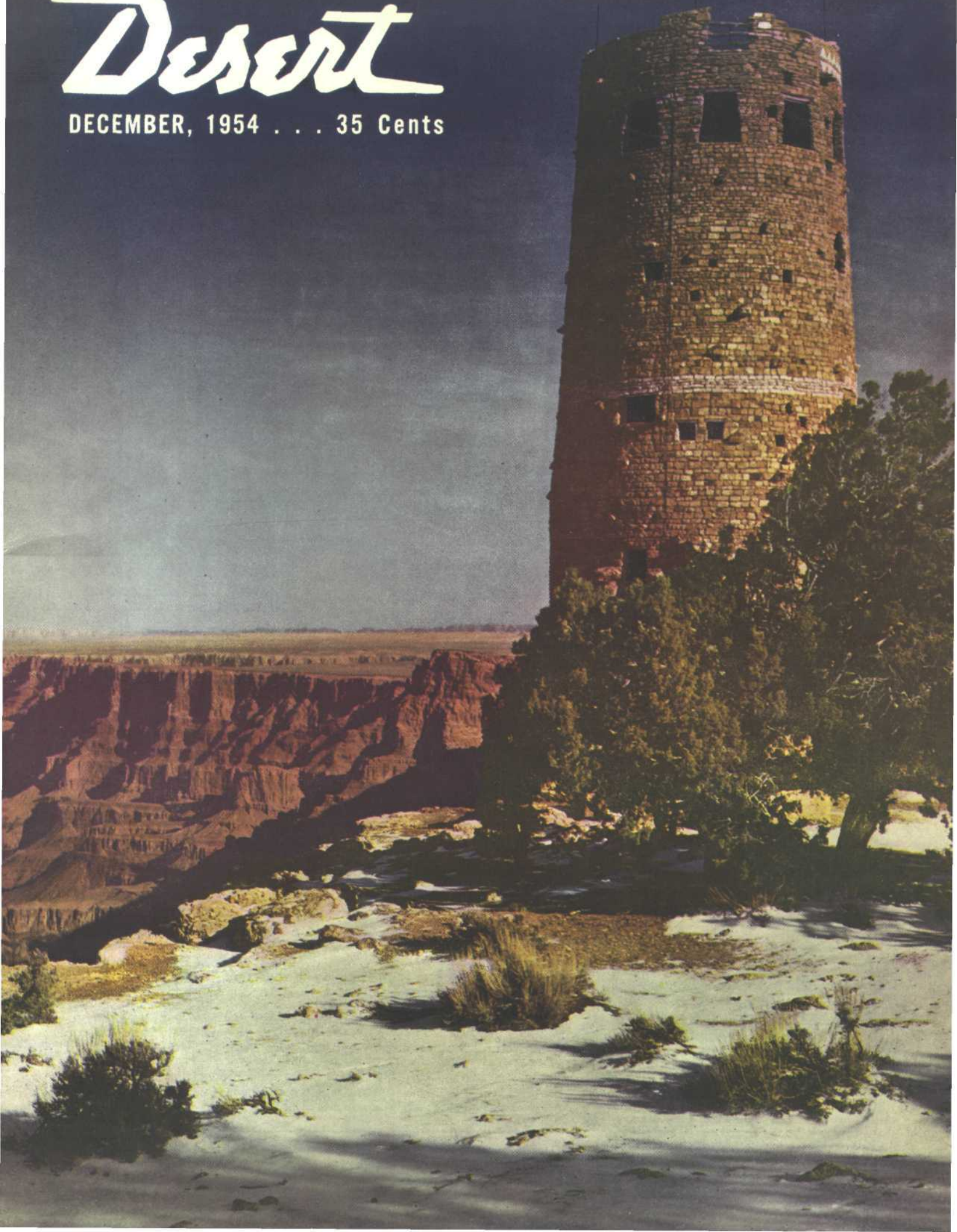


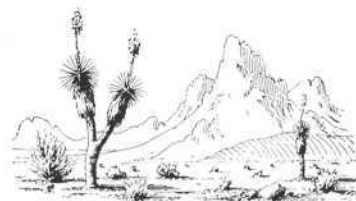
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DESERT CALENDAR

- Dec. 1-3—Farm Bureau Convention of New Mexico, Albuquerque, N.M.
 Dec. 4—Palm Springs Desert Museum Field Trip to Dolomite Mine off Palms to Pines Highway, Palm Springs, California.
 Dec. 5—Lecture "Indians of California" by Arthur and Donald Barr, Southwest Museum, Los Angeles, Calif.
 Dec. 6-17—National Resources Conference, Albuquerque, N. M.
 Dec. 10-12—Pilgrimage and celebration by Tortugas Indians, Las Cruces, New Mexico.
 Dec. 11—Achones Procession after Vespers, Church of Our Lady of Guadalupe, Taos, New Mexico.
 Dec. 11-12—Sierra Club's Camping Trip to Stein's Rest Oasis, near Indio, California.
 Dec. 12—Desert Sun Ranchers' Rodeo, Wickenburg, Arizona.
 Dec. 12—Jemez Pueblo "Matachines," Santa Fe, New Mexico.
 Dec. 12—Feast Day of Nuestra Señora de Guadalupe celebrated on eve (Dec. 11), Taos and Santa Fe, New Mexico.
 Dec. 12-13—Dons Travelcade to Tucson, Gila Bend, Ajo, Saguaro National Monument, from Phoenix, Arizona.
 Dec. 16-24—Nightly pageant-processions (Posadas) depicting search for lodgings by Mary and Joseph in Jerusalem, Mesilla, New Mexico.
 Dec. 18—Palm Springs Desert Museum Field Trip to Magnesia Springs Canyon, California.
 Dec. 18-31—Illuminated "City of Bethlehem" Christmas panorama, Climax Canyon near Raton, N.M.
 Dec. 19—Dons Travelcade to Vulture Mine, Wickenburg. From Phoenix, Arizona.
 Dec. 24—Ceremonial Dance, San Ildefonso Pueblo, Santa Fe, N.M.
 Dec. 24—Night Procession with Cedar Torches, Taos Indian Pueblo; Ceremonial Dances after Midnight Mass, San Felipe, Laguna, Isleta Pueblos, Santa Fe, New Mexico.
 Dec. 24—Procession of the Virgin, Taos Pueblo, Taos, New Mexico.
 Dec. 24—Christmas eve in Spanish villages, N.M.; bonfires for El Santo Nino (the Christ Child) lighted before houses and in streets, also before candle-lit Nacimientos (Nativity scenes).
 Christmas Week—Nativity Plays, Los Pastores and Las Posadas (old Spanish plays) in St. Joseph's auditorium and in homes of descendants of settlers, Taos, New Mexico.
 Dec. 25—Ceremonial Dance, Taos Pueblo, Taos, New Mexico.
 Dec. 25—Deer Dance, Taos Pueblo, Santa Fe, New Mexico.
 Dec. 25-28—Dances at Jemez, Santo Domingo, Tesuque, Santa Clara pueblos, Santa Fe, New Mexico.
 Dec. 26—Turtle Dance, San Juan Pueblo, Santa Fe, New Mexico.
 Dec. 26-Jan. 1—Southwestern Sun Carnival, El Paso, Texas.
 Dec. 26—Desert Sun Ranchers' Rodeo, Wickenburg, Arizona.
 Dec. 31—Deer Dance, Sandia Pueblo, Santa Fe, New Mexico.
 Dec. 31—Annual Pegleg Smith Liar's Contest, Borrego Valley, California.



Volume 17

DECEMBER, 1954

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Sierra Club members on the summit of Boundary Peak, highest point in Nevada. Front row, left to right: Rosie Balsam, Roland Kent, Ken Rich, Jr., John Delmonte; second row: Dick Woodward, Lloyd Balsam, Art Widmer, Louise Werner, Jill Johnson; back row: Walt Collins, Leader Brad Brush, Elgin Pierce, Ken Rich, Sr., Polly Connable, John Nienhuis. Soon after this picture was taken, the climbers scrambled down a ridge, across the state line and up Montgomery Peak, California.

Atop Nevada's Highest Peak

Thanks to the perfection of light plastic gear and dehydrated foods, a hiker can now go out and live comfortably for three days out of a knapsack that weighs 25 pounds or less. And that includes the luxury of a down sleeping bag and an air mattress. Here is another of Louise Werner's delightful stories of fun and adventure on high mountain trails—with many useful hints for those who go in for backpacking.

By LOUISE TOP WERNER

Photos by Niles Werner

Map by Norton Allen

HAVE YOU EVER crossed a state line at 12,800 feet above sea-level? You can do it in the White Mountains, a desert range that stretches for 30 miles along California's central eastern border and then slips over the line into Nevada. Immediately the ridge soars to 13,145 feet, to a point appropriately called "Boun-

dary Peak." Boundary Peak is the highest point in Nevada. Beyond it the ridge falls rapidly to foothills and disappears.

We members of the Desert Peaks Section of the Sierra Club, a group devoted to exploring the desert mountains of the Southwest, naturally felt the attraction of a desert mountain

with such an impressive position and altitude.

We decided to explore Nevada's highest point on a Fourth of July weekend, approaching it from the east. Driving from Los Angeles to Owens Valley via highway 395, we turned northeast at the town of Big Pine, over Westgard Pass into Deep Springs Valley and crossed the line into Fish Lake Valley, Nevada, where the road became 3A. We left the black-topped road at the Highway Maintenance Station in Fish Lake Valley, turning left on a fair desert road that took us 13½ miles to road's-end at 8000 feet in Trail Canyon. The total mileage from Los Angeles was 340.

A stream watered the meadow where the road ended. A board table

and bench and a ring of sooty rocks around a pile of ashes indicated a well-used campsite. It was a clean and pleasant spot, uncluttered by the piles of cans and bottles which mark the stopping place of the litterbug.

We changed from the cool clothing which had made our drive through the desert in July more comfortable, to the warmer, sturdier garb recommended for climbing at high altitudes: trousers of rough twill with voluminous pockets (military ski and marine pants are favorites), a red plaid shirt, a cap with visor to shade the face, boots with rubber lug soles and three pairs of woolen socks.

Foot comfort is of prime importance. One who has not solved his foot problems will hardly enjoy mountaineering. Some like close fitting boots. Personally, I find a boot most comfortable when it is large enough to hold in-soles in addition to three pairs of woolen socks, and still allow the foot play. You will seldom find a boot salesman who has tramped the trails. He will sell a boot that looks good and feels good in the shop. The hiker is interested in how the boot will feel after his feet have pounded the rocks for hours. Niles and I are in the habit of carrying three pairs of woolen socks with us when we go to try on new boots.

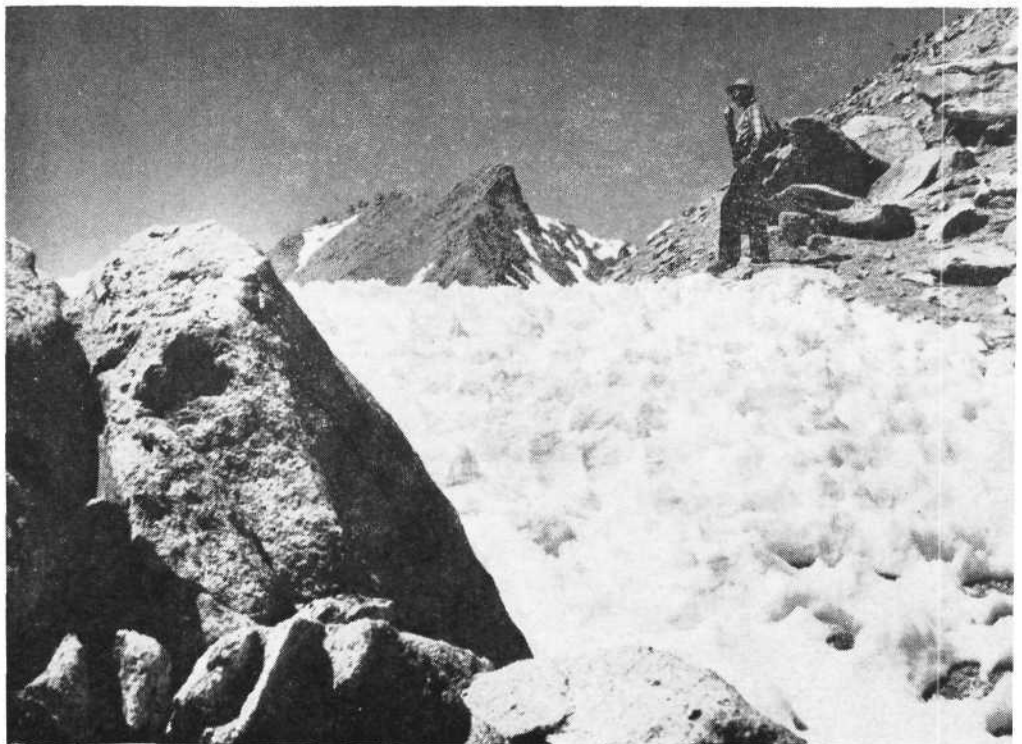
We were to carry our knapsacks about two miles up-canyon to the highest available water, camp there overnight, climb Boundary Peak the second day, camp another night and, knapsacking back to the cars, drive home the third day.

My knapsack bulged with a four and one-half pound down-and-feather sleeping bag, mummy type, a two pound plastic air mattress (a luxury recently added as a concession to age), a one and one-half pound rubberized nylon ground cloth, two dinners, two breakfasts and two lunches (three pounds), nylon parka and wool sweater (14 ounces), a billy can to cook in, a cup and spoon, quart canteen (to be filled next day for the climb to the peak), scout knife, flashlight, matches, dark glasses, first aid kit including sunburn salve and moleskin for blisters. Ten years ago a knapsacker could not eat well, sleep warm and be generally comfortable and prepared for emergencies on a mountaineering weekend such as this with less than a 40-pound pack. Today, with nylons, plastics and improved dehydrated foods, he can do it with 25 pounds or less.

Animal trails meandered up the canyon. A grouse boomed in a willow thicket, a hollow sound with a

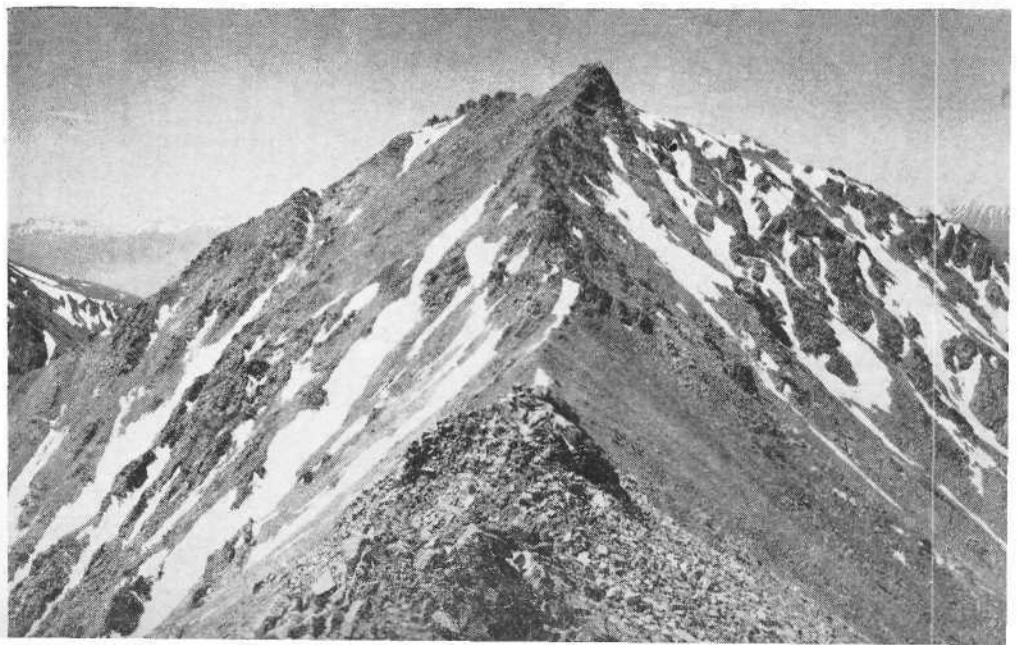


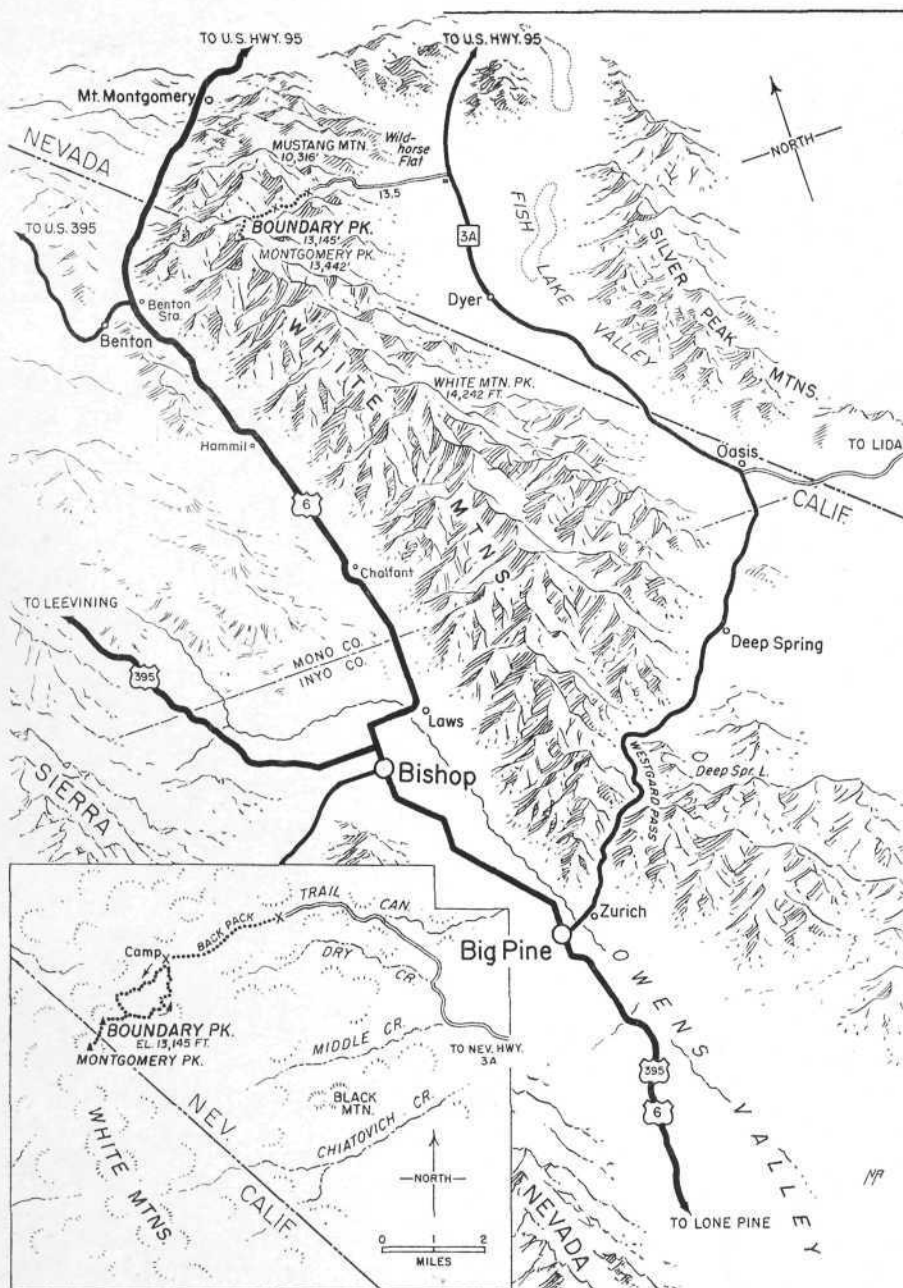
From Boundary Peak, highest point in Nevada . . .



With a pause to view Fish Lake Valley below . . .

. . . We dipped across the border to California's Montgomery Peak.





mysteriously aloof note in it, and soon the plump gray bird fluttered into our path and whirled noisily away.

Birch and willow thickets gave way to a spongy meadow where wild onions mingled with iris and tomato red columbines above a cloud of blown dandelions. The spiralling leaves of skunk cabbage decorated the stream's edge, and wild roses caught at our clothes. "The Mountain's Pride," a pink and blue penstemon, stood off by itself, too dainty to join the others.

Trail Canyon is one of the few remaining refuges of the wild horse in Nevada. Though their ancestors were domestic horses who strayed from ranches in the valleys below, these animals in their battle for survival have become like mountain goats, climbing the rocky slopes where no

domestic horse can follow. In summer they crop the grass in the high meadows; in winter they paw the snow from the frozen sage and gnaw at scrub pine, greasewood and rabbit brush. Half a dozen of them watched us from near the top of an 11,000 foot slope that enclosed the canyon on the north. Their hoof-prints and droppings along our trail indicated that the stream was a popular rendezvous.

The canyon climbed so gradually we hardly realized we were gaining elevation. Contouring up the slope a little, to avoid particularly dense thickets of willow and birch, we passed immense old pinyon pines whose bases had been washed bare on the lower side, exposing unbelievably large ramifications of roots that had developed bark for protection.

Some of our friends were already camped in the highest part of the canyon that afforded both water and level space, at about 9500 feet. On the north the sage-covered slope, olive drab with shadows, went up to 11,000 feet; on the south a lower, more gradual slope bristled with dark green pinyon pines. The stream, here little more than a trickle, cut through the turf. A quarter mile to the southwest, beyond a jumble of boulders, a tongue of snow hugged a trough in a yellow slope that climbed up to a ridge beyond which hid Boundary Peak, our objective for the morrow.

Sparrows riddle-dee-deed in the willows as we washed up and gathered wood to cook our dinner. A Clark's crow scoffed from a pinyon pine when we unpacked our dehydrated meal. As an experiment we had brought a new—and "improved," the manufacturers claimed—brand of dehydrated food. The vegetable stew weighed about an ounce per serving. To two servings we added a 7-ounce can of veal loaf. A package of biscuit mix promised, on the label, to make dumplings when mixed with water and cooked in the stew. We dropped a dumpling in the stew. It changed its mind and became gravy.

The same biscuit mix promised to become a pancake batter when stirred with water and powdered egg. We poured a little on a greased aluminum foil pie plate set on the coals. It spread, filled the plate, puffed up until two inches high, browned beautifully on both sides and ended up as a shortcake on which we poured dried peach sauce. Tea and sugar completed a dinner that had weighed only eight ounces per person in our packs.

The sun sank behind the head of the canyon and immediately we felt a nip in the air. It was hard to believe we had sweltered in Fish Lake Valley that noon at a temperature above 90. Six hours later and 4500 feet higher, it took a wool sweater, a parka and a roaring campfire to keep us warm.

Knowing the leader would be waking us at daybreak, we didn't linger long around the fire.

Sinking into the buoyant depths of the new air mattress, I felt entirely repaid for the extra two pounds it had weighed in the pack. Buoyancy is not the only recommendation for an air mattress. In high altitudes a 4½ pound down-and-feather sleeping bag alone sometimes hardly keeps the camper warm. An air mattress under it, however, insulates him from the cold and damp that comes up from the ground.

Breakfast over, Leader Brad Brush,



Climbing up the backbone, the yellow slope of scree—finely broken rock into which footsteps sink and slide back—fell behind and the hikers' pace quickened to Boundary Peak ahead.

a young accountant from Glendale, California, gave the call to start. Though the sun would not hit camp for some time yet, the snow tongue that marked our route lay white against the yellow scree to the southwest. Elgin Pierce, John Delmonte with son James, 15, and Dick Woodward fell in line immediately, as usual. These powerhouses never need a second call. As they crossed the stream and traversed a meadow thick with yellow mimulus, John Nienhuis, Ken Rich with Ken Jr., 10, joined them, scaring up a jackrabbit that streaked off toward the jumble of boulders ahead.

"On the map, Boundary Peak, Montgomery Peak and Mt. Dubois appear to be close together along the ridge," said Roland Kent, 14. "Why can't we climb all three today?" Any argument that experience might put up against such youthful exuberance merely went in one ear and out the other. He had to see for himself.

The vanguard waited at the snow tongue for the others to catch up. Walt Collins paused to watch a hawk

sail over the ridge. Lloyd and Rosemarie Balsam, Polly Connable, Art Widmer and Jill Johnson together examined some quartz specimens they had picked up among the granite. Walt Heninger took advantage of the rest to lean on his cane and tell an anecdote. Back at camp Clem and Lee Todd were just starting, with Assistant Leader John Wedburg bringing up the rear. The job of assistant leader is not a popular one, since he must keep the rear end of the line always in view, sacrificing the opportunity of climbing with the group. Another of his duties is to carry the first aid equipment.

The long yellow scree slope stretched up to the ridge. We had left all trails behind. Scree is finely broken rock that has eroded off above, poured down and covered the slopes below. We avoid ascending on scree whenever we can because footsteps easily sink and slide back in the soft stuff. This one we couldn't avoid without going a long way around. So we called on our patience and went at it, resting often on outcropping boulders that seemed like islands of stability in a sea of scree.

Ken Jr., with youthful eagerness, attacked the scree aggressively with the result that he moved a lot of scree downhill without gaining much headway. "Take it easy," warned his father. "Save your energy." And that's about the only way you can make headway on scree: place your foot lightly, transfer your weight with a minimum of motion, and you will do a minimum of sliding.

Unstable as the scree was, rosettes of stonecrops had anchored in it. Patches of fragrant white phlox attracted swarms of small blue butterflies. Corsages of cinquefoil glistened yellow, as if security were not important.

The longest scree slope comes to an end, and so did this one. From the top of the ridge our campsite in the canyon bottom 1500 feet below still lay in shadow, but sunlight flooded the upper half of the north slope. Something stirred among the sage there and Walt Collins picked up the wild horses in his binoculars, in about the same spot we had seen them the day before. We could now see over the



Ken Rich, Jr., 10, carried his 10-pound pack two miles to this campsite, then up the next day to the top of Boundary Peak.

11,000 foot ridge to a mesa dark green with pinyon pines.

But our route lay in the opposite direction, where the ridge humped skyward. Pinnacles thrust up out of it like vertebrae on the backbone of a dinosaur. Sudden gusts of wind rattled among the boulders as if through dry paper. Up here it felt more like November than the Fourth of July.

Rounding a pinnacle we surprised a rosy finch pecking away at a pitted snow patch. Not many birds venture to an altitude of 12,000 feet. The rosy finch, a mountaineer at heart, has discovered in these lonely high snow patches a never ending food supply. Every sunny day the perfectly preserved bodies of insects thaw out on the surface: butterflies, moths and other winged insects, who sailed up on air currents, never to return. Spiders are often seen high up on glaciers. Seeds, too, are carried up.

If you ask a human mountain climber why he climbs mountains his answer is likely to be somewhat unclear. The rosy finch has a perfectly understandable answer. He climbs in order to eat from a deep freeze that Nature automatically keeps well stocked with his favorite foods.

At 13,000 feet most of us were pressing into action recesses of our lungs we never use at sea-level. One or two felt nauseated. Some took salt tablets. Clem Todd, whose family is in the citrus industry in Riverside, California, told us that laboratory tests show that we lose Vitamin C through our pores as well as salt. That may explain why climbers so relish citrus at high altitude levels. Tensing Norkey, the Sherpa who climbed Mt. Everest, spoke repeatedly about his craving for "lemon water."

A climber can usually overcome altitude nausea by conditioning, exposing himself gradually to high and higher altitudes. Once overcome by nausea he may not get over it until he goes down, but the chances are that if he tries it again soon, he will go higher before becoming nauseated. An ounce of conditioning is worth a pound of antidotes.

Altitudes between 12,000 and 20,000 feet stimulate one who is conditioned to them. It may be that he absorbs a stimulant from the rarified atmosphere, possibly cosmic rays. About 12 airline miles south of where we were climbing, the University of California was studying cosmic rays on White Mountain Peak, 14,242 feet high, the highest peak entirely surrounded by desert in the United States. Whatever the cause of the stimulation, it sharpens the senses and makes one's spirits soar.

People who climb together to these altitudes develop a peculiar rapport. They will drink from the same canteen without fear of germs; they will share their food, their wraps, their socks—anything they have considered worth carrying in their cut-to-the-bone packs. We have yet to hear of any ill effects from such unsanitary behavior. The expansive feeling lasts for days after coming back to sea-level.

The scree slope had fallen far below where it lay glaring in the midday sun. We pulled up over a hump and lost sight of it. Dead ahead an easy incline led to the summit of Boundary Peak.

Any direction presented the eye a roller coaster ride along snow-etched ridges, up over pinnacles, down pinyon covered slopes, into deep canyons, across salt flats and up to lakes and mountain peaks.

The White Mountain Range itself stretched southwest. Half an airline mile away, across a 300 foot dip in the ridge, Montgomery Peak in California curved up to 13,442 feet. Most of us scrambled across, pausing in the lower part of the saddle to drink from our canteens a toast to the fact that we were crossing the line into Cali-

fornia without a customs official asking us whether we carried any citrus.

From the summit of Montgomery Peak, Roland Kent, the eager youngster who had expressed a wish early that morning to climb three peaks in one day, looked over toward the third peak across a 2000 foot drop and said no more about it.

Returning over Boundary Peak, we wrote our names in the aluminum register box the Desert Peaks Section had placed there in 1947. In the intervening six years nine parties had signed in, three of them Desert Peaks groups.

Ladybugs swarmed over the summit boulders and flying ants an inch long wanted to share our fruit cocktail and sardines. It had taken five hours to climb both peaks. We congratulated Ken, Jr., on being the youngest to have accomplished that feat.

From the summit back to camp took less than three hours. The scree that had slowed our ascent let us down in a hurry. We sank a boot into it and slid a yard, sank another boot and slid two yards. We literally skated down.

Though thousands of motorists drive up Owens Valley every summer, along the western base of the White Mountains, few recognize that here is the highest desert range in the country. Unlike the Sierra Nevada whose spectacular beauty is displayed on the other side of the valley, the White Mountains save their charms for those who explore them.

• • •

JACK MITCHELL VICTIM OF AUTOMOBILE ACCIDENT

Jack Mitchell, widely known in the West as the owner and guide at Mitchell's Caverns in the Providence Mountains of California, met a tragic death October 28 while he was doing a good turn for one of the visitors at the Caverns.

According to the report received at *Desert Magazine* office, a visitor's car got out of control and lodged against one of the cabins near the Mitchell home. In an effort to help the motorist, Mitchell crawled under the auto with a wrench. When the car was released it rolled downhill, dragging Jack with it. Finally it fell over a low wall and Mitchell was crushed beneath the weight of the vehicle. Mrs. Mitchell and others lifted him into another auto and started for Needles to take him to a hospital. He died before reaching Essex. Mrs. Mitchell plans to make her home with her daughter, Mrs. Al Beauchamp in Needles.

Old Fort Schellbourne of Pony Express Days

In the bareness of the Steptoe Valley of Schellbourne, Nevada, are the ghostly remains of a once lively town, where Pony Express riders, on their round-the-clock schedule stopped for fresh horses. Nell Murbarger tells the story of this town and of the last surviving inhabitant she met there.

By NELL MURBARGER
Photos by the Author
Map by Norton Allen

NEVADA'S BRASSY SUN had at last been swallowed by the pine topped heights of the Egan range, and the blue shadows of evening were beginning to gather in the canyons and steal across the wide bareness of Steptoe Valley. It was supper time, and I was hungry and tired. I had already covered more miles than I ordinarily drive in a day, but a foolish sort of urge had kept drawing me on.

I wanted to camp that night at old Fort Schellbourne.

Schellbourne has been a ghost town for nearly 70 years and has always been one of my favorite camping sites. Its cold spring water and shade would make it a desirable stopping place even without its great historical interest; and, of course, there is always a possibility of finding there my good friends, Ruth and T. C. Russell.

The Russells own the old town — lock, stock, and barrel—as well as a lot of surrounding land. But since they also operate a full-time business at Tooele, Utah—nearly 200 miles distant, over unpaved roads—the time they can spend at the ranch is much less than they would prefer.

Two years had passed since my last visit to Schellbourne. I couldn't see that my two years absence had brought any appreciable changes. The mountainous old willow trees and cottonwoods flanking either side of the street still met overhead in a green arch, their boughs interlacing until the road seemed to pass through a long, dark tunnel. Here were the same old stone-and-log buildings and pole corrals; and if the old brick stage station and post-office was a trifle more frayed at the seams, it still appeared good for many a year. As this rambling relic of Overland Mail days serves as the Russells'

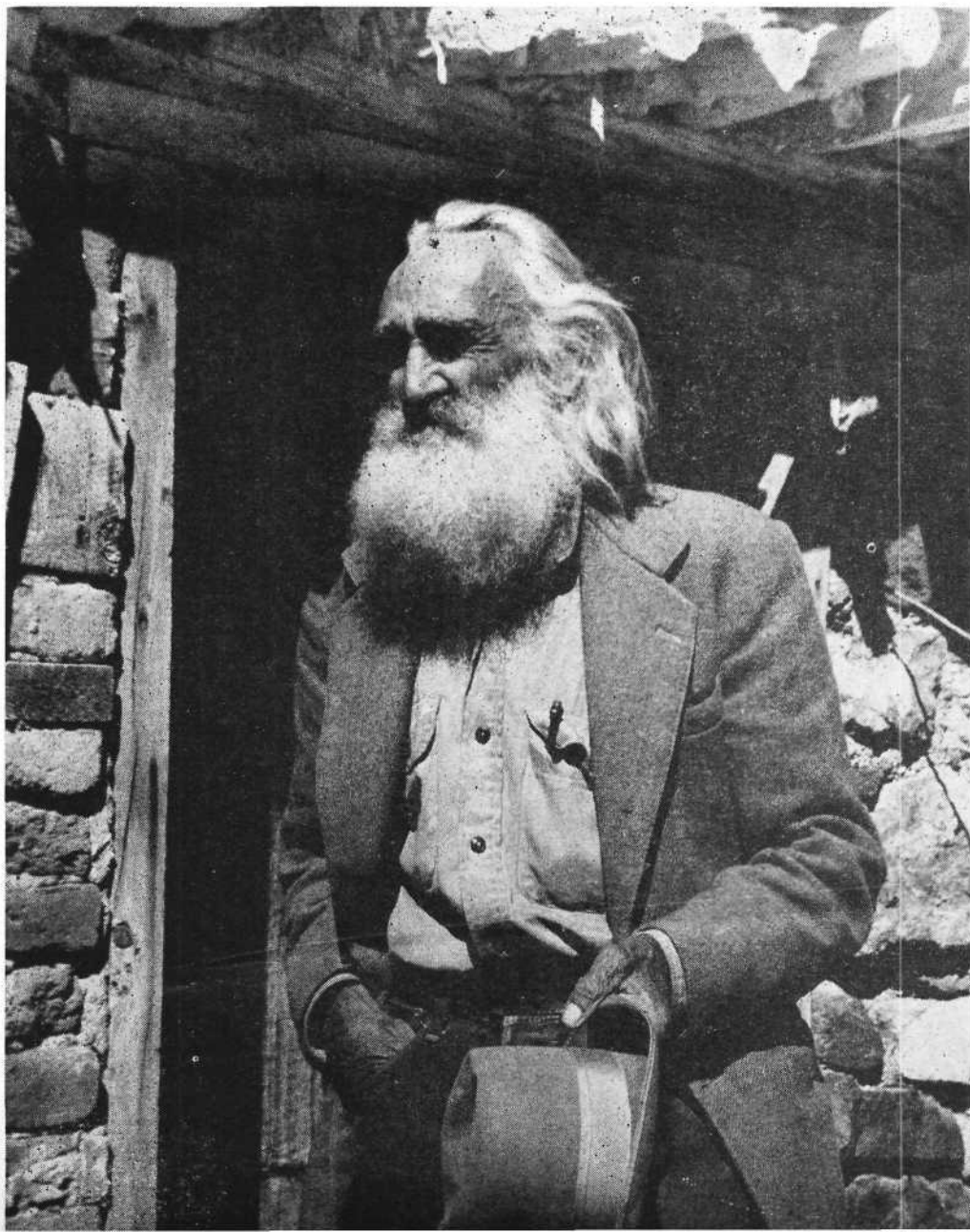
headquarters whenever they are at Schellbourne, I turned back past the building toward the kitchen door. The station was unoccupied but in the rear was a battered old sheepwagon, its open door framing a yellow rectangle of lamplight.

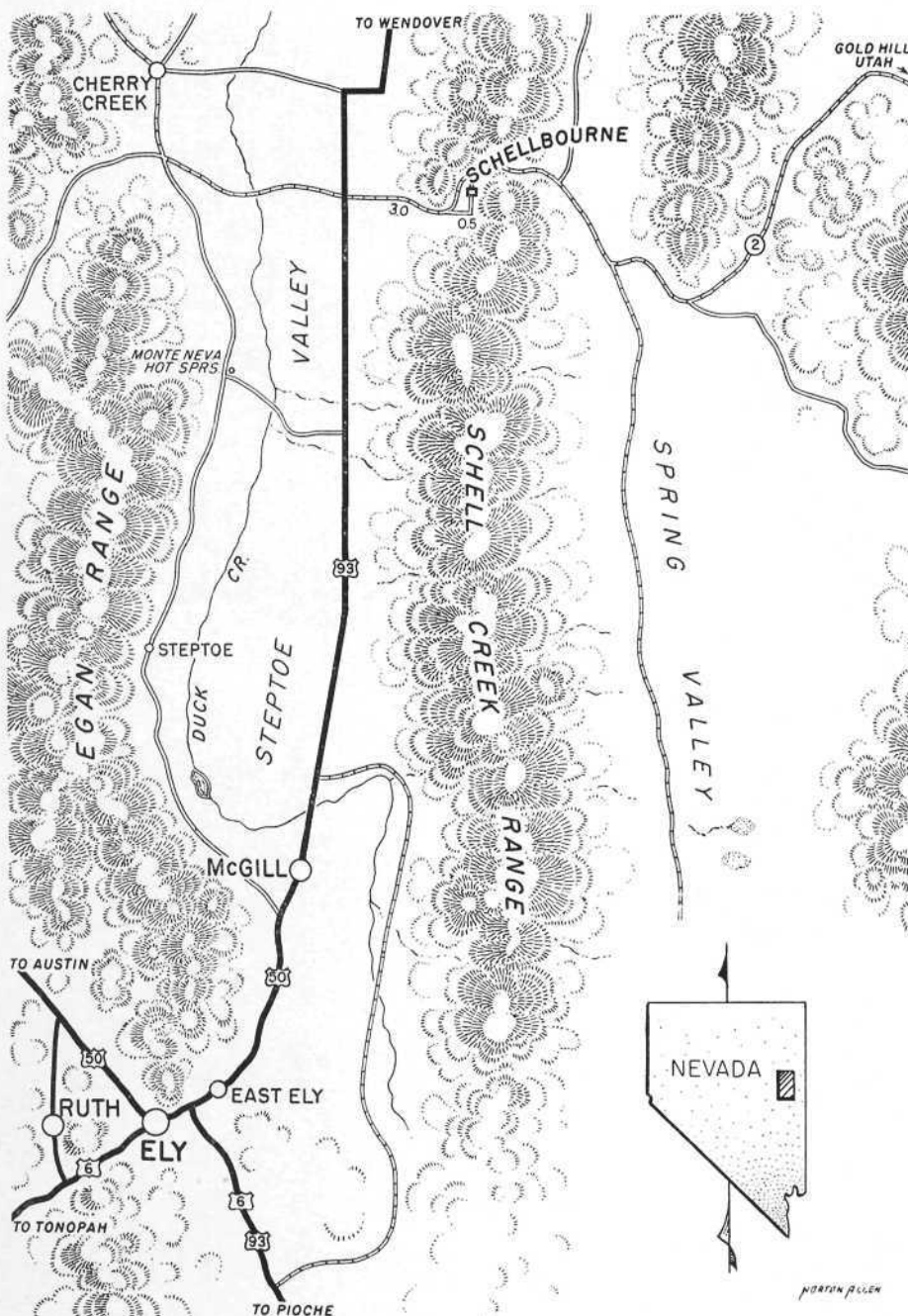
Bounding from his lookout post under the wagon, a brown-and-white shepherd dog came racing to meet me—his tail wagging a violent welcome.

"He grows lonely for people," said a soft voice. "We both do . . ."

Raising my eyes from the dog, I saw approaching me an old man. In the half-light of the dying day, he appeared to be ancient, I thought—as ancient as Abraham! Only a small man—no taller than myself and slight of build—his head was bare, his shoes

Thomas Mulliner, early day stage driver, is the last survivor of the old mining camp.





broken, and the garments that hung loosely on his thin frame were patched and faded. Yet, looking at that man, it seemed to me I had never met a more noble-appearing soul.

It was his face and eyes that told the story. They were kindly and compassionate; and I knew, instinctively, that here was a person who would never be guilty of casting the first stone. Covering the lower portion of his face was a full beard, as soft and white as fine silk floss, and a rippling cascade of white hair fell to a point well below his shoulders.

Introducing myself, I inquired for the Russells—only to learn that they were at Tooele. I remarked that Schellbourne seemed to be bearing up well under the passage of time. The old man shook his head.

"Oh, no!" he said. "It's going down fast—and it makes my heart bleed to see it! It didn't look like this when I was teaming through here, 50 years ago..."

And then he remembered his role as host. He introduced himself as Tom Mulliner, current caretaker of the place, and insisted that I permit him to cook some supper for me. When he learned of my plans to camp there, overnight, he was equally insistent that I should not stay outside, but should occupy the Russells' living quarters in the old stage station.

Preceding me into the large, old fashioned kitchen, he struck a match and touched its flame to the wick of a kerosene lamp. Then he kindled a fire in the old cook stove, and set a tea kettle of water over the flame.

I prepared supper and washed the dishes. And then, while the lamplight flickered on those 90-year-old walls, we sat in the shadows, by the crackling fire, and talked of the days when Nevada and Utah were young.

His mother, said Tom Mulliner, had come West as a baby girl, riding in a Mormon handcart pushed across the plains by his grandmother. His father was a teamster hauling freight to all the prominent Nevada mining camps of that day.

"That was in the 1860s," he said.

Tom had been born at Lehi, Utah. He had spent his boyhood around horses, and soon as he was judged old enough to be entrusted with a team and load, he had followed in his father's footsteps, hauling supplies to the mining camps and ore to the mills. He had teamed into Ophir and Mercur, and Cherry Creek, when these present-day ghost towns were seething with activity. He had driven stage and freight wagons, and had carried the United States mail on horseback from Gold Hill, Utah, to Cleaveland, Nevada—a 50-mile route through heat, drouth, blizzards and mountainous snow.

For 80 years this man had cast his lot in the bordering counties of Tooele and White Pine—mostly around mining camps—yet, he had never engaged in mining, himself.

"I tried it once," he said. "For about a week! But I couldn't stand it underground. I had to get out in God's sunshine, again; out where I could see the sky, and feel the wind—and be around horses."

As the old man continued to weave stories of pioneer days in the Steptoe country, the time slipped away unnoticed by either of us until the hour was late. With a murmured apology for remaining so long, my host refilled the wood box, wished me a pleasant good night, and returned to the sheep wagon that was his home.

Spreading my bedroll on a bunk beside the stove, I blew out the flame in the lamp and lay down in the warm, soft darkness. It was very still and peaceful and as I lay there in the quiet dark, I reviewed the eras of history this town had witnessed—history told me that evening by Tom Mulliner, who had helped to make it; history gleaned in the past from old emigrant diaries, and yellowed newspaper files, and musty records kept by three generations of men.

Among the first white persons to look upon the Steptoe Valley and its sheltering ranges had been Howard

Egan, of Salt Lake City, an ex-major in the Nauvoo Legion. To prove his contention that a central route across Western Utah Territory would be shorter and otherwise preferable to the circuitous Humboldt River trail, Major Egan had loaded himself and supplies on a single mule, and in ten days — September 19 to 29, 1855 — had ridden from Salt Lake City via the present site of Schellbourne to Sacramento, a distance of 700 miles! Never before in history had such a feat of saddle endurance been known, nor has it been equalled since.

Major Egan had proven his point; and with inauguration of the first Overland mail line in 1858, the stages of W. A. Chorpenning were routed to follow the trail thus pioneered. Every 12 or 15 miles along this course were located relay stations where spent horses might be changed for fresh teams. One of the stations so established was Schell Creek, later to be known as Schellbourne. The Pony Express and the first nation-spanning telegraph line later followed substantially the same route and utilized the same station facilities. With these vanguards of civilization, the first white settlers entered the region as station tenders and hostlers — and political troubles began brewing.

For untold centuries of time the grassy meadows fringing Steptoe Valley had been occupied by large Indian camps. With fish in the streams, pine nuts in the hills, and abundant wild game everywhere, the region had constituted a desirable home and the redmen were not too willing to relinquish it to their white brothers — many of whom did not always behave in brotherly fashion. While their smoldering resentment never ripened into large-scale battle, nuisance raids became a scourge on the land.

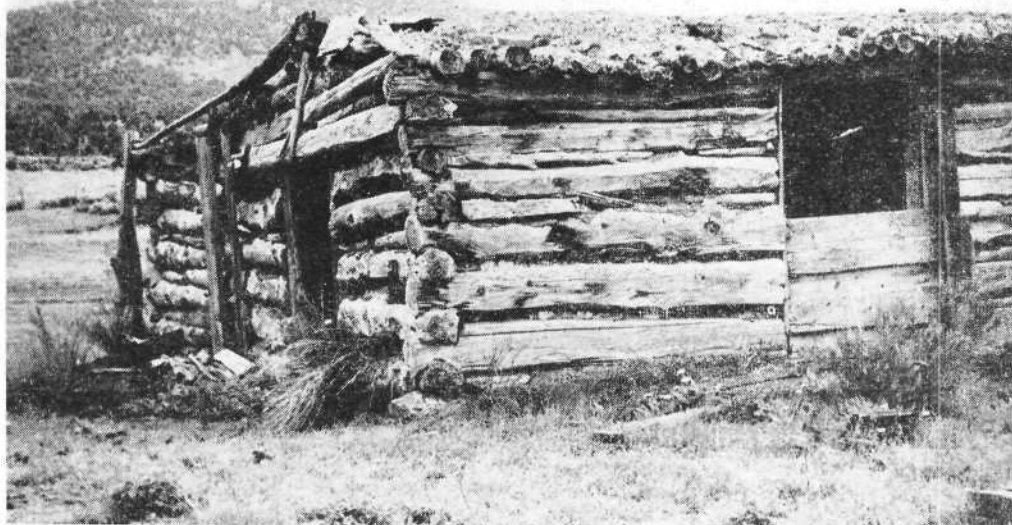
Pony Express riders, pounding through the mountains on their around-the-clock schedules, were shot from ambush; mail coaches were attacked, drivers and station tenders slain, corals and barns burned, and horses stolen.

Even after discontinuance of the Pony Express, mail stages continued

Top — According to legend, this earthen-roofed log house served as a relay station for the Pony Express and Overland Mail.

Center — Formerly the postoffice of Schellbourne, this old adobe is headquarters for the Russells during their infrequent visits here.

Bottom — Ruins of the Wells Fargo Bank, unoccupied for half a century. The tall doors are of iron.



to rumble through Schell Creek for a number of years, and Indian raids on these carriers became so flagrant that a company of cavalry was assigned to protect the station. With this development, the place was renamed Fort Schellbourne and soon afterward began taking on the dignified airs of a town.

Silver ore had been discovered in the nearby ranges, and Schellbourne had blossomed into one of the first mining boom camps in White Pine county. Additional dwellings and business houses sprang up, and three quartz mills were built.

For all their spectacular beginning, Schellbourne's mines did not hold up well under intensive operation, and by 1885, most of her frame buildings had been trundled across Steptoe Slough, and up the mountain to Cherry Creek, and a majority of her citizens had removed to more promising fields.

With this development, Schellbourne became a ghost town, with William—"Uncle Billy"—Burke, as its last loyal defender. When there was no longer any possibility of the place "coming back" as a mining camp, the Burkes had acquired the townsite and adjacent valley as a ranch.

"The Burkes were still living here when I first made the acquaintance of Schellbourne, more than 50 years ago," Tom Mulliner had said.

Despite the generations of phantoms that must have been prowling those rooms—the restless spirits of teamsters and Indian fighters, and Express riders and miners—I slept undisturbed in the old stage station.

At sunup I rose and crossed the kitchen, and looked out the back window. The old sheep wagon was still standing there in the yard, the same as the night before; but the old man was nowhere to be seen.

Kindling a fire in the stove I started typing notes gathered the previous day. About seven o'clock came a soft knock at the door. It was my venerable friend from the sheep wagon.

After we had talked a bit, I mentioned my wish to get some pictures of the place, and asked if he would care to walk over to the old Wells Fargo bank building with me.

"Why, yes!" said the old man, with a twinkle. "But I must warn you—you can't cash any checks there!"

And so, with the dog padding at our heels, and the soft dust rising in little puffs with our every footfall, we walked up the willow-shaded lane to the old bank. We examined the splendid stone masonry represented in its front wall; and we speculated on why

a bank should have had need for so many doors and windows—five pairs of great, tall openings—each more than twice the height of a man, and each with its heavy iron shutters, now green with age.

From the bank, we went on across the ravine and up the slope to the cemetery, a small fenced plot in the midst of meadowland and wild flowers. Searching through the deep matting of grass, we found three graves with wooden crosses, but without identifying names or dates. Three other graves were marked with cut sections of iron wagon tire, hammered flat, and riveted together in the form of crosses. Into these three iron crosses had been chiseled three names—William, Eliza, and Marshal Burke—the people who had clung to Schellbourne for so many years after it had been forsaken by all others.

"You've seen our goldfish, I suppose?" asked the old man. And I had seen them; but because it was a good morning for musing and dreaming, we wandered on across the meadow slope to the big spring that waters all this valley. And there, in that clear pool, swimming lazily around the dark roots and dark rocks, were myriad pieces of living flame—the mysterious goldfish of Schellbourne.

No one knows whence they came, nor how long they have been there. Possibly some pioneer woman or girl had owned a cherished bowl of goldfish, and when she died or moved away to some new location, her pets had been turned into the pool to shift for themselves. However it happened, the fish thrived and multiplied. And now, they are big enough to fry—had one an appetite for fried goldfish!—and their numbers have increased until they fill even the stream that flows out of the spring and down the ravine.

We went on to prowl about the other old buildings and corrals, including the log structure that legend has set apart as the one-time relay station of the Pony Express. While the building looked old enough to have housed the Pony Express, there is no known proof that it ever served those frontier mail riders. The old Army fort, too, has disappeared, along with the three quartz mills. All that is left of the town's ancient past are a few old log and stone buildings, five pairs of ponderous iron shutters, two rows of great old trees, a pond full of goldfish, and six old crosses in a graveyard.

With our circle of the townsite completed. Tom Mulliner and I returned to the stage station, and I said I must be going on my way. My host expressed regret that I should leave with-

out seeing the Russells; and while I was stowing my few belongings in the car, he hurried to fix for me a sackful of fresh eggs, a jar of cheese, and a bag of cookies for my lunch.

"If Ruth had been here," he said in his soft voice, "she'd have fixed you a good meal. Ruth's right handy that way. But the old dog and me—we mean well, but we're not much good!"

As the work-knotted hand of the old teamster dropped to the shepherd's head, the old dog thumped his thin tail in answer and raised his brown eyes to the faded blue eyes of the man.

They were still standing so as I drove out of the yard and started down the long, green tunnel of willow trees, and back toward the highway.

• • •

ORGANIZE TO PROTECT JOSHUA TREE MONUMENT

For the protection of Joshua Tree National Monument and other scenic desert areas against vandalism and commercial encroachment, 48 representatives of Southern California groups dedicated to the conservation of natural resources met at a campfire program at the mouth of Deep Canyon in Coachella Valley, October 23 and made preliminary plans for a permanent organization.

Harry C. James of the Trailfinders presided at the informal campfire meeting. He proposed that the association be formed for "the purpose of safeguarding for wise and reverent use by this and succeeding generations those desert areas that are of unique scenic, scientific, historical, spiritual and recreation value."

He suggested that the immediate concern of the organization be the preservation of Joshua Tree Monument.

The mining interests want to open the Monument to prospecting, and failing in that, to have the park restored to the public domain for all kinds of commercialization. A second group is composed of business men who are seeking to have a trunk line highway built through the heart of the Monument. Since the groups seeking these concessions are well organized, James pointed out the urgency of organizing those who would guard the integrity of the park area.

Selection of a name and the formation of a permanent organization was delegated to a board of seven directors: Harry C. James, chairman, Margaret Lutz of Twentynine Palms, Dr. Harry Weber of La Quinta, Roderick Leap and Richard Keller of Thermal, Dr. Ernest Tinkham of Indio and Randall Henderson of Palm Desert.

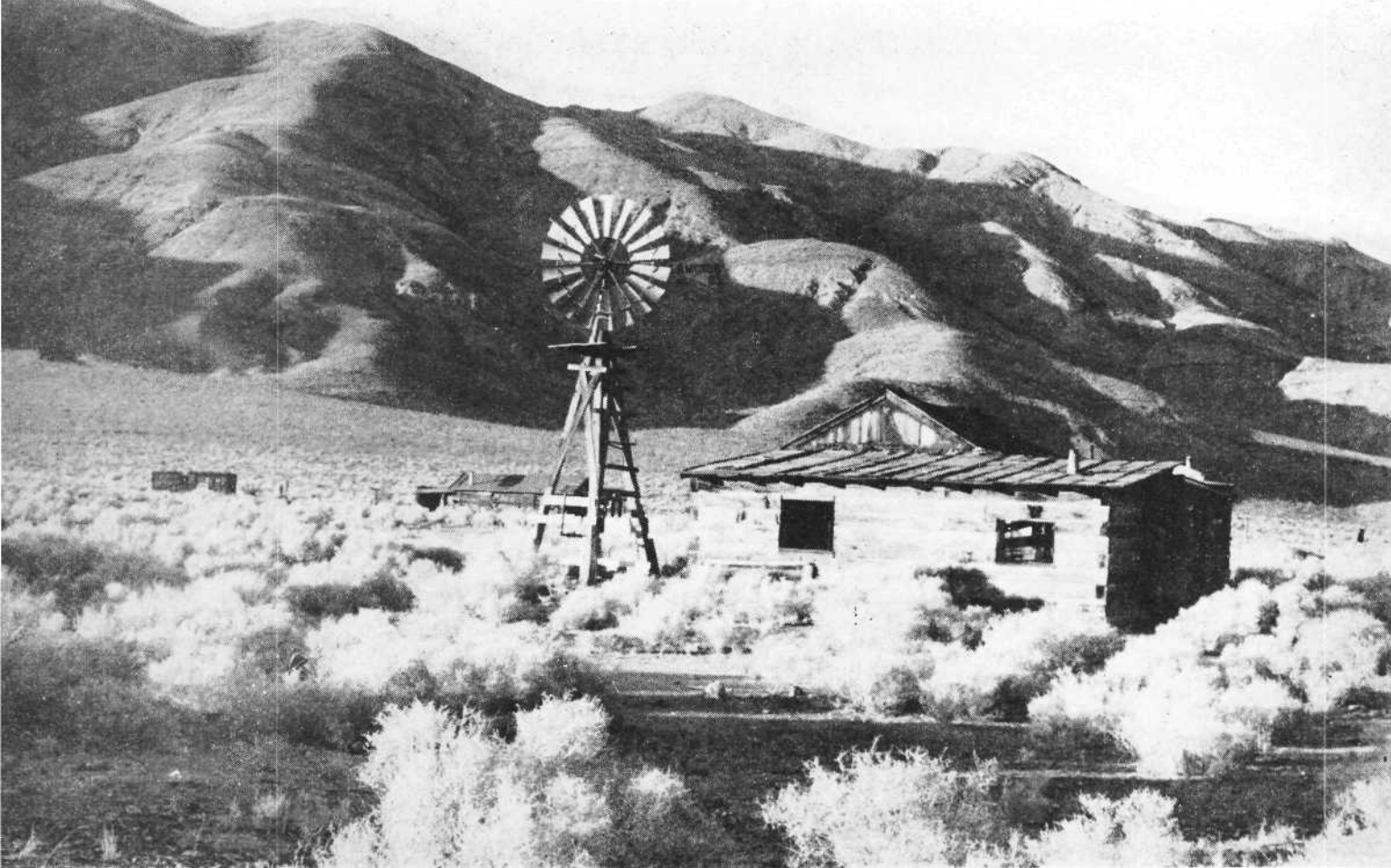


Photo taken near the old mining camp of Garlock

by Henry W. Smith

IF THERE BE HILLS

By T. M. ATKINSON
Berkeley, California

If there be hills I will not fret;
If there be sky I can forget
All of those small oppressive things,
The cold world's slurs, the hard world's
stings.
Calm are the hills like Olivet.

One shall tramp trails with dew gems wet,
Climbing the crag's high minaret,
Finding the balm that stillness brings—
If there be hills.

Then—when the years and life are met,
When friends grow few and fewer yet,
And dreams of youth are gone with wings,
I shall look up as one who sings
A quiet song sans all regret,
If there be hills!

OUT OF THE AGES, SHIP OF ROCK

By BESSIE BERG
Rio Linda, California

This great rock sweeps upward like the soul
Of all humanity throughout all time,
Rising above its talus to a goal
Belayed in the sky, atop the climb,
The far perspective—by endurance won
From the corroding ages. In the sun,
Above the surge of storm she stands and
none
But the strong in heart attain her view—
sublime!

I DWELL IN THE DESERT

By MORGAN MILLS
Sun Valley, California

In fancy I've lighted the desert stars
Each one, as the twilight goes,
Thinking—they'll make a friendly light
As the wind and the darkness flows
Through the vast warm mother-desert
To light the traveler's way
Or light the dreams of a lonely soul,
Or a plane or a wandering stray.

Forgotten Acres

By LAURA LAVIGNE
Phoenix, Arizona

Still life!
Here droops an open sagging gate,
A strip of grayish splintered wood.
The loop of wire—no hand of late
Has placed upon its weathered post.

The frosted-red brick fireplace stands,
Charcoaled chips upon the hearth;
Two tongues of iron-rusted bands
Half buried in the barren ground.

A wheel hub-four spokes still intact;
The boot of brown without a heel
With leather stiff, unyielding-cracked
Into an ancient time-worn fret.

The bent horseshoe—a bit of glass
Sun-amethyst, I bend to touch,
And see a green-striped lizard pass;
A lightning proof that here is still—
Life!

WESTERN DESERT

By ALICE MOORE REGAN
Fresno, California

Invoke the keeper of the stars to make
Across the desert waste, a path of light
For those who journey in the well of night,
And guide their train until the day shall
break.

Before the sun and drowsing creatures wake,
Breathe deep the desert scent, the acrid bite
Of hoary purple sage—and pray the bright,
Horizon peaks surround a cool blue lake.

How primitive and strange these barren
sands,
Where weathered cross and broken rim of
wheel,
Mute evidence beside the trail, reveal
The fiber of all pioneering bands
Who, faced with perilous unknowns, appeal
To God, and onward traverse virgin lands.

FOOLS' GOLD

By KATHARINE BUOY KEENEY
Portland, Oregon

Beside the desert smoldering fire
The while thin wind-blown flames expire
He dreams alone. His search for gold
Only the future can unfold.

As he reviews the wasted years
Of lonely toil his vision blurs
As still a deep insistent urge
Of hope renews its upward surge.

Now, digging down with drill and pick
Within the rocky soil, a flick
Upturns a stone with yellow gleams
That shows iron pyrites golden seams—

Fools' gold—again the futile quest
With which he long has been obsessed—
In search of treasure, win or lose,
The lure of gold Man still pursues.

SMOKE-TREE SHADOWS

By AMY VIAU
Santa Ana, California

The lovely smoke tree casts a lacy patch
Of shadow on the sandy desert spread
Through sunny day, but through the moon-
glowed night
It lays a blue medalion down, instead.

"The Silent Stars"

By TANYA SOUTH

Men often speak of silent stars.
How know they stars are still?
Perhaps our untrained hearing bars
The harmony they fill.

The music of the spheres! How few
Have heard that cadence clear!
The flea might think us silent, too,
Because it fails to hear.



Small pieces of bluish and pinkish agate and many colored jasper, which are washing down from the hills, upper left, can be collected right in the old Nevada Scheelite-Rawhide road from Highway 50. Wash just beyond the long low ridge, upper right, is turnoff to the gem field.

Gem Hunting With a Nevada Prospector

By HAROLD O. WEIGHT

Photographs by the Author
Map by Norton Allen

THERE HAVE BEEN times in my rock collecting when a full canteen was more important than the finest specimen, and I believe most desert rockhounds have known such moments. But not until I stood with Carl E. Sullivan on the slopes of the Fairview Range in western Nevada some time ago did I realize how simple our water problems are compared with those of our Southwestern predecessors, the prospectors.

Every experienced collector on the desert carries not only the water his party will need, but ample surplus in case the car's cooling system develops trouble or a breakdown forces him to walk out.

The old-time prospectors not only had to make sure their own supply of water was adequate, but their animals also must be watered.

Sullivan was one of the old-timers. "In 1911," he said, "I prospected these mountains with a buckboard and two burros. But I worked only half time at prospecting. The rest of the time I was hauling water from the Frenchman's spring, which is three miles from

A veteran Nevada prospector told Harold and Lucile Weight of a field where calcite geodes, jasper and agate could be found in abundance and lead them through little known trails to the Fairview Flats area, where on a dark, volcanic slope, the Weights found a Rockhound's paradise.

the present Frenchman's station on Highway 50. He charged us a cent a gallon.

In 1950 "Sully" had invited Eva Wilson and Lucile and I to his old stamping grounds in the Fairview Mountains to show us the gem material he had seen there many years ago—at a time when he was more interested in gold and silver than in pretty rock specimens.

"There's geodes," he told us, "calcite geodes and jasper and agate." He had first seen them in 1907 when as a boy he came this way with his father in a freight wagon. The freight outfit made only 12 miles a day, and Sully had time for side-trips into the mountains along the way.

I first met Sullivan when he was living near Dead Horse Wells, a historic watering place at the edge of Rawhide Dry Lake. He had followed mining most of his long life and had been in on the boom at Rawhide, and later at the Lucky Boy strike near Hawthorne, Nevada.

He had returned with the three of us to see if he could re-locate the geode field he had first seen nearly a half century before. The road we were following goes northward past the Nevada Scheelite mine and eventually connects with Highway 50 near Frenchman's station.

As we set out, Sully cast cautious eyes at the white cumulus clouds, already building towering castles in the deep blue of the Nevada summer sky. "Don't camp in washes in this country during the summer rainy season," he said. "Unless you're about 200 feet above the stream bed. We have real cloudbursts. Usually in the day, but three out of ten hit at night."

At Nevada Scheelite, a big Nevada tungsten producer about nine miles from Dead Horse Wells, we zeroed the speedometer. Less than two miles farther, the road swung to the right over a summit, continued northeast through a valley scarred by old freight-

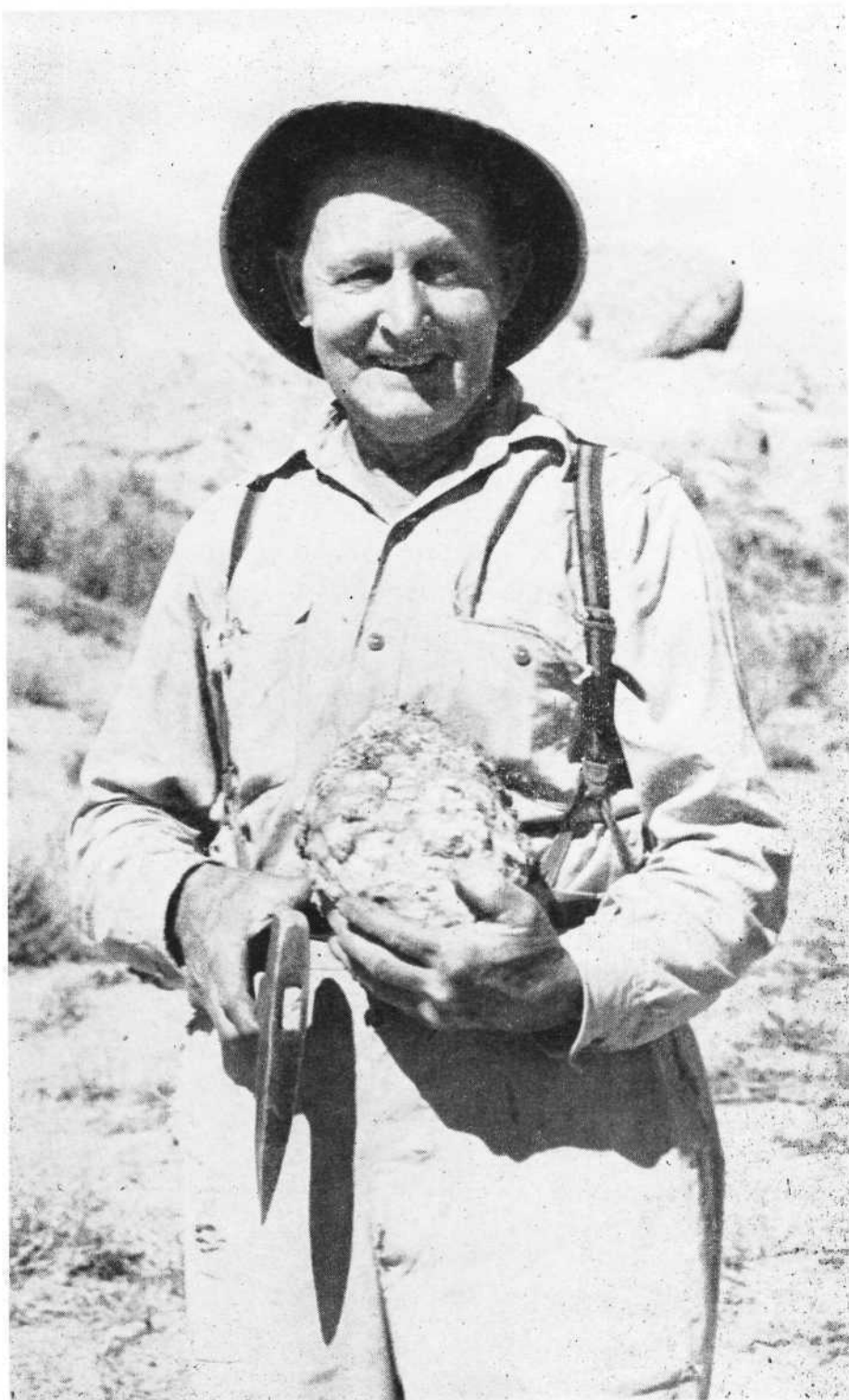
ing trails, then headed north, still dropping, through a winding passage — Sully called the Narrows — between colorful little hills of green, yellow, ash and red.

Our interest in the area where Sully was leading us had been whetted by accounts that our friend Hallie Jones — a friend to all rockhounds visiting Nevada — had given us regarding beautiful cutting material southeast of Frenchman's Station. Hallie — who operates Jones Farm House restaurant at the junction of Highways 50 and 95, a few miles west of Fallon — also showed us spectacular flowery yellow in clear chalcedony which she called Gold Leaf Jasper, found in that field. We had supposed she and Sully were talking about the same area. But at the bottom of the Narrows we crossed a great wash which cut the darkish hills to the east. It and the clifflike red butte to the northeast were the landmarks Hallie had described for her field. And when we crossed the wash, eight miles from Nevada Scheelite, the little road she had told us about made a reverse Y up its bank, heading into the hills.

"There's lots of jasper and good agate up there, too," Sully said. "You can find small pieces washed down from those hills in the roadbed for the next few miles. But my turnoff is about five miles farther." After climbing out of the wash and around a little hill and heading down the bajada we stopped to hunt along the road. Sure enough—among the wheel marks and especially to the east of the road, were hundreds of little broken bits of blue and pinkish agate, pieces of chalcedony and agate nodules, and small chunks of jasper.

Approximately 12.4 miles from Nevada Scheelite we turned sharply eastward on a little trail apparently unused for a long time and difficult to follow. With Sully's guidance we reached a group of rounded reddish granite knobs and outcrops, 2.7 miles from the turn-off. An old arrastre told of efforts to grind treasure from the stubborn rock. Arrow chippings of brilliantly colored jasper, particularly near two small seasonal waterholes, indicated more ancient—and possibly more successful—exploitation of local mineral resources.

Sully led us north and east to a volcanic canyon, a striking contrast to the surrounding granites. Here, in the soft dark crumbled rock and ash were the rocks he had promised. Some of the calcite geodes were large—eight inches or more across — with beautiful crystal-coated interiors, but there seemed to be few of them. There were many smaller geodes and agate nodules and quantities of vivid red and yellow banded and patterned jaspers.



Carl E. Sullivan, Nevada miner and prospector with one of the big calcite geodes from the field he passed through on his way to the Rawhide Rush in 1907.

Heavy clouds had been building up all morning and soon it started to sprinkle. Remembering Sully's warning, we headed back for the main road and reached Dead Horse Wells in a drenching rain.

Next day, with the storm breaking up, we explored the field Hallie Jones had described. The road which branched up the wash beside the red butte was well marked until it entered

the bed of the wash, three-tenths of a mile from the Y. Then it vanished completely and there was evidence of recent and violent flood runoff with great boulders in the wash, large uprooted shrubs and mud-coated rocks. But the bed of the wash was firmly packed and we had only occasional trouble in following it. Almost immediately, it branched with a striking formation of pale greenish tufa mark-



ing the left branch, which leads into the collecting area.

And we soon found that it was a splendid spot for rockhounds. About a mile from the road to nearly three miles, and particularly to the north of the wash on the dark, rolling brush-covered hills, we found the same types of material as in Sully's field in greater quantity and variety and over a vastly larger area. There were thousands of little nodules of calcite, agate and quartz and some larger ones, fine pieces of vein agate, common and gem-grade jasper and jasp-agate in all shades of red and yellow and some green, gold leaf in red, in black and in clear or bluish agate. Much of the jasper had calcite, iron or manganese in it, but

large pieces of high grade were found.

Again this summer we returned to that Fairview field for the first time in nearly four years. We found changes, indeed. Nevada Scheelite had grown to a company town of 145 persons with the mill working 120 tons a day. The camp had its own school and power plant and daily mail and supply service. And a new, direct county road had been cut through from the mine to Highway 50.

Though nothing had been published about this field—there was evidence that either a large number of rockhounds had been there or that a few rockhounds had done a great amount of digging and breaking. But there still are great quantities of jasper and nod-

FAIRVIEW FIELD TRIP LOG:

Miles

- 00.0 Nevada Scheelite road turnoff from Highway 50; 2.2 miles west of Frenchman's Station, 31.8 miles east of Fallon.
- 07.0 Take old Nevada Scheelite-Rawhide road, which angles southeast from the new. Road is not maintained. Watch for cuts and washes.
- 09.6 Watch for left branch, heading east to base of Fairview Mountains at approximately this mileage from Highway 50. (12.4 mi. from Nevada Scheelite) Follow trail to end, 2.7 mi., to Sully's field.
- 14.0 Old main road drops into large wash with branch road angling left along high, red butte. Follow branch road, keeping left at branches in the wash, into gem field from one to three miles from Y. (Y is 8 miles from Nevada Scheelite).
- 20.2 Old main road rejoins new Nevada Scheelite road. (1.8 miles from Nevada Scheelite.)
- 22.0 Nevada Scheelite mine.
- 22.6 Road Y. Left (south) branch to Dead Horse Wells, 8.3 miles. Right (southwest branch) to Rawhide, 5.5 miles).

ules scattered over the surface and there must be a thousand veins of rockhound rock buried or partly buried. Ten minutes' walk and an hour's digging at a surface exposure gave us better gem jasper than any we had found before.

Carl Sullivan did not go with us on this trip. He had moved to Luning, and when we visited him there, we found things had been changing with him too. At the primary, just held, he had been nominated for state assemblyman from Mineral County.

"That means no more prospecting?" I asked.

Sully grinned and shook his head. "I'm through with following the booms, but I'll never quit prospecting. There are times when it seems I have to get out in the hills. I remember the first few nights I spent in Rawhide in 1907. I tried sleeping in a tent boarding house, on one of those narrow cots. Just couldn't get any rest, and I kept rolling out of bed. I told my landlady it wasn't any good—I was too used to sleeping out in the sagebrush. When I came back in to bed that night I found she had tied sprigs of sagebrush all around my bed. And I slept well.

"No," he went on, "I'm still in mining. Partner and I have an iron deposit right up here in the Pilot Mountains we're expecting big things from. And Mineral County, you know, has almost all the minerals. We've even found tin. Non-metallics—why we've

a world of them. Glauber salts, diatomaceous earth, salt, talc. When near supplies are exhausted, businesses are going to reach out. And they're going to reach into Mineral County!"

He shook his head. "And there are so many places I want to look into. And, by the way — I've run across some petrified wood. Maybe next time you're up we can take a look at it."

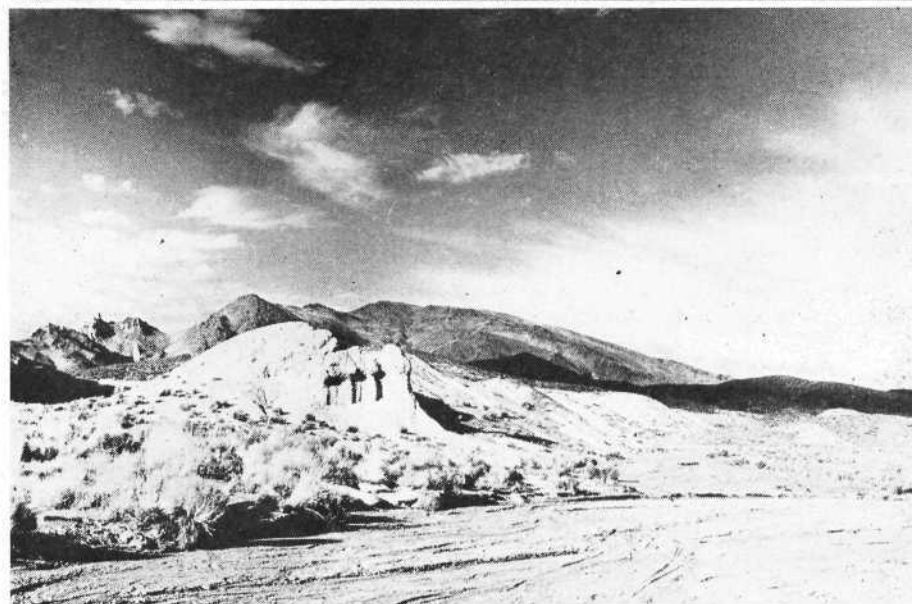
And next time we will. Not just for some pretty Nevada wood, though. Badgered as we are now by doom-predicting commentators and experts and panels accenting the futility of it all, we desperately need the upsurge of faith in freedom which comes through being with men like Sully.

TELLS ABOUT DISCOVERY ANCIENT SEA MONSTERS

One hundred and sixty million years ago, a sea reptile called Ichthyosaur swam in a part of the Pacific ocean that covered western Nevada. This was long before the California Sierras were uplifted from the ocean waters and when Nevada had a sea coast. The creatures looked like giant porpoises and had fins and paddles like whales and fishes. The Ichthyosaur tribe dominated the seas for 100 million years, disappearing toward the end of the Cretaceous even before the whales made their first appearance in the seas. The bones of the Ichthyosaur buried in mud and ooze that has now become solidified into shale and limestone, turned into heavy stone.

These bones were found in a quarry which is the old sea floor uplifted 7000 feet above its former level—the bones resting just as they were deposited and swept by waves long ago. The quarry lies in West Union Canyon in the Shoshone Mountains of Nye County, Nevada, which is a 2½ hour drive from Fallon.

Mrs. Margaret Wheat of Fallon, an authority on archeology recently told how these ancient bones were found. She was assisting Dr. S. W. Muller of Stanford University eight years ago in that area in collecting small shells. It was at that time the bones were first noticed, but Dr. Muller not being interested in old bones at that time disregarded them. Mrs. Wheat however, kept them in mind and in subsequent trips began sweeping off the top layers of dirt. She realized it was an important find and visited Dr. Charles L. Camp at the University of California. Dr. Camp who is one of the three best known paleontologists in the world, became interested, and taking a crew with him to the Shoshone Mountains, found what he calls "the most remarkable deposits of its kind



Above—In the main collecting field at the southern end of the Fairviews. Beautiful gem jasper and jasp-agate and small nodules are found in quantity on the slopes and hills across the wash.

Below—Branch wash which is followed to the main collecting field at the southern end of the Fairviews is marked by this striking greenish tufa "monument."

and in some respects is unequalled." At this time 11 monsters have been found, 50 feet long with 9 foot paddles and eye sockets one foot in diameter.

Because of the interest shown by the many visitors to the site, the State of Nevada may take over the present quarry to preserve and protect it for public use and make it a national monument.—*Fallon Standard*

Uranium Boom at Moab . . .

Moab, Utah, and neighboring Monticello and Grand Junction are in the midst of a uranium boom. Moab's population has jumped from 1200 to more than 4000 in the past 18 months,

trailer courts are filled and motor courts and hotels are reserved for weeks in advance. Big plans are unfolding for the community as a result of the mining activity. A \$3,000,000 building program is underway, including construction of office buildings, remodeling projects and a sharp increase in home construction. Work is expected to begin soon on the multi-million dollar Steen ore processing mill which will employ 300 to 400 persons. There are already more than 500 producing uranium mines on the Colorado plateau and the AEC reports the number grows by 20 each month.—*Pioche Record*



Panoramic view from the shoulder of Rose Peak, one of the most impressive sights on the Coronado Trail. Along the Arizona highway, from Clifton to Springerville, the scenery ranges from thick desert cholla forests to breathtaking mountain views of aspen, juniper and pine.

On the Trail of Coronado

Bulldozers and road-graders have been at work since Coronado and his conquistadores trekked over Arizona's White Mountains in quest of the Seven Cities of Cibola over 400 years ago, but the rugged beauty of the terrain has not changed. Bear, deer, mountain lions and wild turkeys still roam the forested slopes. The Coronado Trail—120 miles long—is known as one of the most scenic drives in the Southwest—and here are a few suggestions as to what may be found there.

By THOMAS B. LESURE
Map by Norton Allen

OUR FRIENDS in Arizona spoke glowingly about the Coronado Trail — how the phantoms of Spanish conquistadores still seem to ride over its wildly beautiful mountains and along its rugged canyons, how ore specimens lie waiting to be picked up, how big game animals roam the virgin forests and fighting trout fill its streams, how ghost towns stand almost within the shadow of smoking smelters. The Coronado Trail, they told us, is one of the most dramatic, most unforgettable motor trips in the Southwest.

Intrigued by their insistence, Nancy and I recently loaded our three children into the family car for a three-day

trip from Phoenix to Clifton, thence over a winding road that goes over the White Mountains and down to Springerville. The Coronado route actually can be covered in a few hours, but we wanted to make a leisurely journey that would give us ample time to enjoy the scenic beauty of this mountain terrain.

Our introduction to the Land of Coronado came as we approached the agricultural center of Safford, 175 miles east of Phoenix via U.S. Route 70. All that first day after leaving Phoenix, we drove over erosion-ravaged desert land streaked with jutting mesas and wrinkled mountains—past the copper towns of Superior and

Miami, into the sandy San Carlos Indian Reservation where dust devils swirled with the slightest breeze, past triple-domed Coolidge Dam whose large lake seemed like a misplaced puddle of water in a vast desert expanse, and through small trading posts like Bylas where Apaches were gathered in quiet groups drinking soda pop or munching ice cream cones. Then—with a verdancy that was dazzling compared to the chalky brown desert—we entered Safford where thick fields of cotton and grain stood green as a result of the life-giving waters brought by the Gila River District Soil Conservation Project.

Except for this one bright splash of fertility, the face of the land apparently has changed very little in the more than 400 years since Francisco Vasquez de Coronado and his armored conquistadores crossed this region on their harsh and disappointing search for the legendary riches of the Seven Cities of Cibola.

Coronado himself described the land as one vast area of desolation where each succeeding mile brought "only a worse way through mountains and

dangerous passes." With the exception of the 40,000 acres of farmland now watered by the Gila, Coronado's description still holds true.

Beyond the perimeter of the Gila Project, we could see that the desert still is king. To the south, rising in hazy-blue isolation from the desert floor, juts 10,720-foot high Mt. Graham, called by Coronado the *Sierra de las Flores* or Mountain of Flowers. To the north, like a movie backdrop, rise the phantasmal Gila Mountains. And all around — just beyond the green fields—are the rough, broken escarpments of low-slung mesas.

After an overnight stop in Safford, we headed eastward on U.S. 70 for about 10 miles, then veered northward on U.S. 666 toward Clifton where the Coronado Trail officially begins. At first, we drove through thick cholla "forests" standing like fuzzy cactus sentinels along both sides of the road. But as we climbed gradually from the desert floor through low hills capped by chocolate-colored rock castles and odd conglomerate formations, the cholla gave way to dense clumps of whip-like ocotillo and squat prickly pear heavy with purple fruit.

A little more than seven miles from U.S. 70, we crested a high knoll from which the land ahead looked like a huge painting. Far to the left, the creamy-gray smoke of the copper smelter at Morenci rose lazily above the mountains. Directly ahead lay a terraced array of high mesas and rugged peaks whose pastel shaded emerald, gold, amethyst and sapphire slopes looked like a huge pile of natural jewels in the haze-shrouded atmosphere. And spread out below us—like the top of an oven-crust cake—was a high, arroyo-streaked desert plateau frosted by the vivid, green-clad banks of the Gila River that cut across its breadth.

Soon we were driving among the colorful buttes and canyon-cleft mountains of Clifton where we stopped at the office of the weekly newspaper, *The Copper Era*, for a chat with editor Al Fenn and his assistant, Mrs. Hildred Brown.

Times have changed a lot, they told us, since the '80s when Clifton was a rip-roaring frontier mining town in which four or five shootings a day were commonplace. In those days, tough miners, gamblers and outlaws ran the town and were just as likely to blast at each other as they were to blast out a glory hole in search of gold. Now, a quiet, almost somnolent, air grips the town and only a few old prospectors scour the hills and canyons in hopes of a strike.

A number of pioneers still living in Clifton, Mr. Fenn continued, remem-



The "Coronado" narrow gauge locomotive that once hauled ore cars from Metcalf to Clifton. It now rests in the center of Clifton as a lonely relic of Arizona's first railroad.

Hannagan Meadows Lodge, located about halfway along the Coronado Trail, is one of the many resorts and sportsmen camps offering tourists reasonable accommodations.

ber the days when the only way supplies could be brought into Clifton was by mule-drawn freight wagons coaxed over rough trails. It was tough going, he explained, but nobody seemed to think too much about it. I couldn't help wondering, though—as I remembered the broken terrain over which we had just passed—how they ever did it. Were men different in those days, or just a bit more determined?

Mr. Fenn interrupted my thoughts by saying, "Come over here. I'd like to show you something."

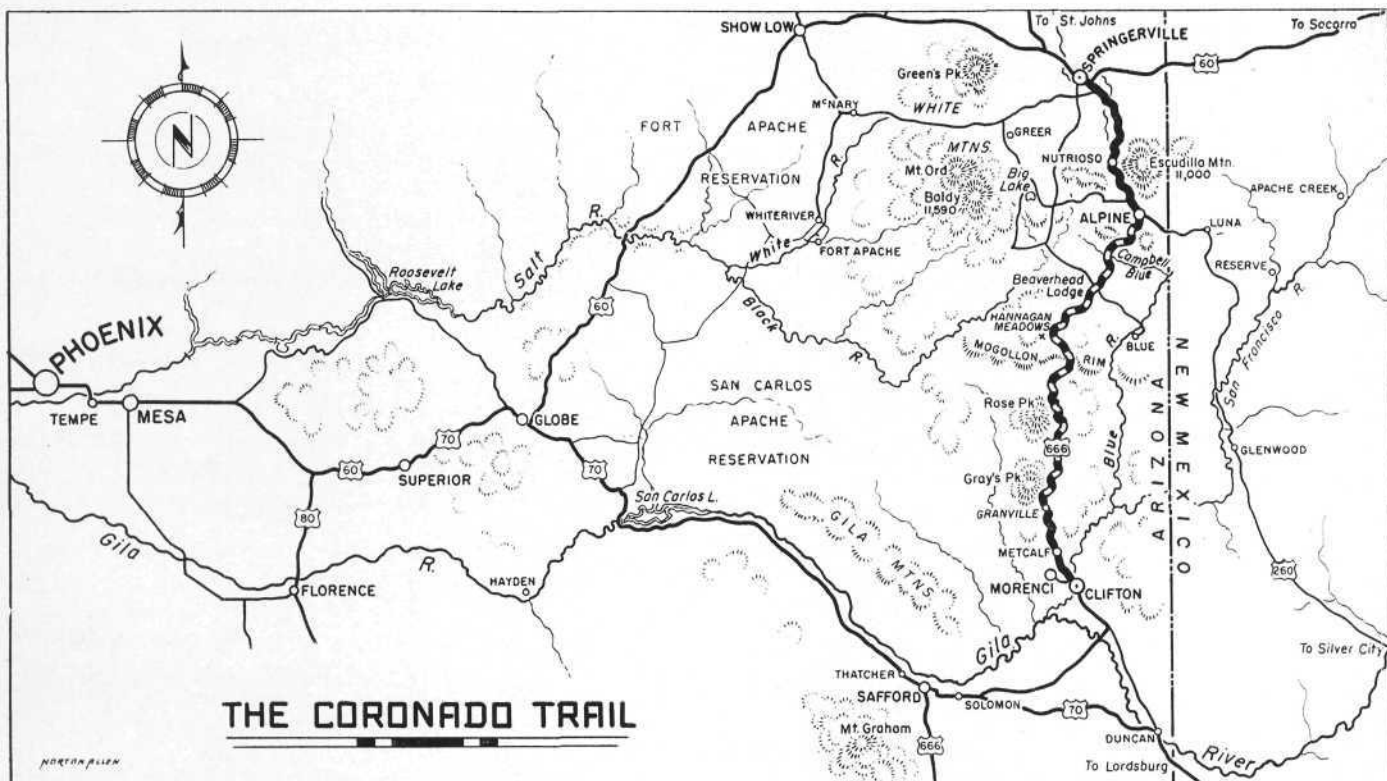
Pointing to an old picture on the wall, he added, "This was Clifton in

1909. See this area?" he asked, indicating a large smelter, "That's where most of Clifton is now. There's hardly any trace of the old smelter left."

"Where is the copper smelting done now?" I asked.

"Up at Morenci. It's about five miles from here—on the top of the mountain. That smelter is the fourth one in the area—and there's enough copper around here to keep it going full blast for at least another 40 or 50 years."

In the square outside the newspaper's office stands an antiquated locomotive that once hauled gold and



copper ore from nearby Metcalf to the smelters in Clifton.

Yes, times have changed in Clifton. Even the old Cliff Jail nearby—blasted out of solid rock in the '80s to house some of the West's most dangerous desperadoes—now is almost hidden by a modern service station.

I went into the old jail, going down a wooden staircase that led through a large trap door to two iron-barred, rock-walled cells. As I walked through the cramped rooms, an ironic picture came to mind. Here, in one of these same cells some 75 years ago, the jail's builder languished for a while. Seems he celebrated the jail's completion by investing his pay in mescal juice and shooting up old Hovey's Dance Hall. He was promptly arrested—and became the jail's first occupant.

Leaving Clifton, we headed up the Coronado Trail (U.S. 666) into a tantalizing atmosphere of yesteryear. Just north of the town, the road ran through ragged sand and rock hills honeycombed with scores of gloomy, abandoned glory holes. It looked as though almost every miner in creation had made his mark on the hillsides.

Soon we were among mountainous slag heaps and huge, blue-streaked boulders that tumbled haphazardly down to the banks of trickling azure and rust-tinted Chase Creek. All around us the rocks and cliffs were vivid with the tell-tale color of copper ore. We pulled off the road and began browsing around. In short order we picked up several good copper specimens. Even the children, delighted

at the chance to add new treasures to their hoard of toys, filled their pockets—though, I must admit, to them any old rock was just as good as a hunk of ore.

About five miles north of Clifton, we rounded a curve and entered Metcalf. When gold was discovered here in 1872, the town quickly mushroomed into a community with 2,000 inhabitants—each intent on claiming his share of the wealth. Shootings, outlaw raids and Indian attacks helped to enliven the early-day diggings, and the old Coronado Railroad hauled the rich ore over its nine-mile track to Clifton. Then the gold played out, the price of copper fell and Metcalf went the way of so many boom towns built solely on the hopes of continued bonanzas.

Now Metcalf is a ghost town—alone with its memories and dogeared with age. Stark, roofless walls and crumbled, weed-covered foundations—weathering back into the ground—mark the bubble that burst. But perhaps most symbolic of Metcalf's history was a brace of battered ore cars clinging like cockeyed acrobats to the side of a steep hill above Chase Creek. Desolate, forgotten and useless now that their mining days were over, they were like a symbol of high hopes dashed on the brink of eternity. What would their tale be if they could speak? We could only guess. For like all ghosts, they presented only a silent, haunting reminder of the past.

North of Metcalf, the Coronado Trail corkscrewed upward in a series

of S- and U-turns into the Crook National Forest where desert vegetation was replaced by increasingly thicker stands of aspen, juniper and pine. The road seemed to cling to the edge of the brown and green hills until suddenly it leveled off and dipped into the Granville Recreation Area where picnic tables were almost hidden by a heavy canopy of trees.

Here the pavement ended and except for a few small stretches of asphalt the rest of the trail to Alpine was dirt and gravel. We found most of the road well-graded except for the section near the Mogollon Rim where the going was rough and the road narrowed to a path reminiscent of the trail blazed by Coronado over this same area in 1540.

Not so many years ago, this whole forest-mountain area was alive with mountain lions which roamed the woods at will, killing off the livestock brought in by pioneering cattlemen. Government hunters have exterminated most of them, but sportsmen told us there are still enough of the big cats around to provide hunters with fine trophies. And along with other big game—such as bear, elk, antelope, deer and wild turkey—they help to make the back country along the Coronado Trail a fine sports area.

As the highway climbed gradually toward 8,000-foot high Gray's Peak, we saw more and more impressive views of the seemingly endless sea of mountains that mark the Trail's scenery. At times the mountains—misting from dark green nearby to blue and

mauve in the hazy distance—seemed like weathered pyramids stacked closely together above emerald sands. At other times they rippled away in tiny bumps as though the land were afflicted with a rampant case of goosepimples. But no matter what their appearance, they had one thing in common; a wild, primeval beauty unspoiled by any mark of mankind.

About ten miles past the Granville Recreation Area we entered the Coronado Trail's thriving cattle country—marked by numerous side roads leading to ranches like the Double Circle. This particular ranch, incidentally, was the scene of many incidents that characterized the early Arizona frontier.

Once four Texas train robbers who sought refuge at the ranch by taking jobs as cowpunchers were traced to the Double Circle by a posse and a desperate gun battle ensued. The four bandits were killed, then buried where they fell. In 1861, White Mountain Apaches staged an ambush on this same ranch. Sixty men, led by Captain Pinkard, made a valiant effort to fight their way out of the trap. But the wily Apaches, skilled in the school of hit and run massacres, slaughtered all but one of the men before taking off into the hills.

Before long, we eased over the shoulder of 8,787-foot Rose Peak on the top of the Blue Range—and into one of the most spectacular mountain scenes of the entire trip. It seemed that all the other vistas had been combined in this one to bring forth a radiant and far-reaching panorama. There was only one thing to do. We stopped to absorb this inspiring scene of natural beauty.

Past Rose Peak, we dipped into heavy pine and aspen forests again, going by picnic areas and numerous trails leading to retreats like Sheep Saddle, Hogan Corral and Strayhorse Canyon. Then, we hit the roughest stretch of the entire drive. The road became rocky and washboardy, and quickly narrowed to a little more than one lane as we started up the face of 10,500-foot Mogollon Rim. The speedometer reading dropped to 10 miles an hour as we bumped up the road. Curious, chipmunk-like ground squirrels peeked over the rocks along the side of the road as if to see how we were making out, then bounded off into the woods. How, I wondered, did Coronado and his men ever get up this precipice? It's difficult enough now with a road. What must it have been like without even a path?

Five miles later we topped the rim — for another fine panoramic view. Then we went through dense growths



Madonna of the Trail, an 18 foot high granite statue designed by August Lienback and erected by the DAR. It is one of 12 similar statues erected from Maryland to California to commemorate the old covered wagon trails. It is located in the center of Springerville.

of tall mountain ferns, into Apache National Forest and a torrential downpour. The rain prevented us from following any of the off-shoot trails like those to K P Cienega Forest Camp, Blue Lockout and K P Creek. But it didn't stop us from seeking a veritable roadside garden of blue, purple, orange, red, yellow and white wild flowers whose kaleidoscopic colors seemed like a rainbow.

It was still raining when we reached Hannagan Meadows whose lush fields are rimmed by tall stands of fragrant pines. Then, as suddenly as it had started, the rain stopped. The sun peeked through the low-scudding clouds and the clear, bright air was spiced with freshness.

We felt that Hannagan Meadows, with its fine forest camp grounds and sportsmen's lodge and cabins, was like a miniature Shangri-la. And as far as

some of the sportsmen with whom we talked were concerned, it was. Plenty of big game in season, they told us, fighting trout in the nearby streams and lots of woodland trails where we could hike to our heart's content or "let the rest of the world go by" while communing with the wonders of nature.

Leaving Hannagan Meadows — reluctantly, I must admit—we continued the drive northward through alternating forests and small, thickly-grassed meadowlands carpeted with a riot of wild flowers. Suddenly, Linda shouted, "Gobble, gobble, gobble!" and pointed to the edge of the road ahead. Sure enough, there was a wild turkey sedately preening itself just off the road. But, seeing our car, it paused for just an instant, then scurried into the sanctuary of the woods.

Linda was all for stopping and giving chase, but it was getting late in the day and we still had 45 miles to drive before reaching the end of the Trail in Springerville. So we drove on—past Beaverhead Lodge, the Blue River junction which leads to Indian cliff dwelling ruins, across the Campbell Blue River and a half dozen forest trails into Alpine, set in a long, narrow, pleasantly green valley.

The rain began again when we stopped in Alpine to telephone ahead for motel reservations in Springerville. But nobody seemed to mind. "The woods need it badly," a storekeeper in Alpine explained significantly. "A good soaking will cut down the fire hazard."

Then, changing the subject, he asked, "See many wild turkeys?" When we told him we'd spotted one, he shook his head and replied, "That's strange. Usually folks see a lot of 'em."

We also learned that Alpine is one of the principal sportsmen's centers along the Coronado Trail. Hunters and fishermen like to use its motels, cabins, restaurants and stores for bases of operation. And those who like to make pack trips into wilderness areas can make arrangements there for horses and guides.

Other focal points for pack trips are Greer, Beaverhead, Diamond Rock and Reed's Lodges, and Sprucedale Ranch. Rates are said to be reasonable. Sportsmen have a choice of packing into either the 7400-acre Mt. Baldy Wilderness Area east of Alpine where the Little Colorado River rises, or into the Blue Range Wilderness Area, south of town, whose 216,000 acres comprise one of the largest areas in the Southwest still relatively free of human development.

The road from Alpine to Springer-

ville—a little less than 30 miles long—is entirely paved, allowing for fast travel. However, we loafed along, reveling in its surging beauty of rolling hills, exquisite meadowlands and wholesome forests. More than all else, we enjoyed its greenness—a verdancy that was so arresting in this sun-browned state of Arizona that it came as a captivating and satisfying surprise.

We found Springerville a typically Western crossroads town where Indians from the nearby Fort Apache Reservation roamed the streets or loaded their pick-up trucks with supplies. We also found it was fully aware of the tremendous fishing potentialities along the Coronado Trail and in the surrounding White Mountains. Enterprising natives had posted such home-made signs as "Worms—10c a Dozen"; "Worms That Get Results" and "Well-fed Worms."

Well, I didn't want any well-fed worms that day, but I did want to get more information about recreation along the Coronado Trail. So I dropped into the National Forest Headquarters on the second floor of the local Post Office. Briefly, here's what I learned:

The best trout fishing is to be found in the waters of Crescent and Big Lakes, Grant and K P Creeks, the Luna Reservoir, and the upper East Fork of the Black River. Fishing in the Fort Apache Reservation requires a special permit which can easily be obtained at Indian settlements or sportsmen's centers. There are more than two score picnic and camping areas on or fairly near the Trail and visitors are welcome to use them without charge. Forest rangers only ask that campers observe the usual rules of good woodland behavior and fire prevention. Pack trips require special arrangements at the already mentioned centers, and no one should attempt a wilderness trip without competent guides and adequate supplies.

When we left Springerville the next morning for the return trip to Phoenix—remembering the Trail's many scenic and natural wonders—I couldn't help thinking that Coronado didn't recognize a good thing when he saw it. He rode right over his El Dorado and never knew it! But maybe it was just as well. If he had realized its riches, the ensuing years might have completely changed the face of the land. And the Coronado Trail wouldn't be calling me back as it is now—not for a day but for a real, leisurely sojourn in a land where, just for the asking, I can enjoy a wealth of scenic and recreational attractions enriched by more than 400 years of colorful history.

Hard Rock Shorty of Death Valley



"Dusty?" repeated Hard Rock Shorty in answer to a question asked by one of the dudes who was loafing on the lean-to porch at the Inferno store.

"Yep, I've seen times when they wuz a heap of sand blowin' in the air. Back 30-40 years ago we had a dust storm the old-timers still talk about.

"That wuz a real duster. Blowed 43 days and nights without countin' Sundays and holidays. Dust wuz so thick you could walk on it. Pisgah Bill wuz drivin' a freight wagon in from Tonopah, an' for over 30 miles them mules wuz walkin' on nothin' but dust. He busted a single-tree comin' through the pass an' when he'd replaced it he hung

the old one on a pinyon tree growin' beside the road. After the storm wuz over he went back to git it and found it hanging jest where he put it—on a limb 19 feet above the ground.

"Down here in Inferno it wuz kinda dusty too. It wuz so thick we dug tunnels to git over to the cabin across the road. But the funniest thing was that gopher that started drilling holes in the dust so he could git up to air. He musta spent a lot o' time doin' it fer when the storm quit and the dust settled down it left him and his holes jest sittin' there outside the postoffice window. Foolishest lookin' gopher you ever saw."

Judges Partial To Pictures of Life . . .

The judges in Desert Magazine's Picture-of-the-Month contest are glad to consider all kinds of subjects—sunsets, landscapes, odd rock formations, unusual plants and flowers, ghost towns, mines etc.—but in making their selections each month they have a wee bit of prejudice in favor of photographs which show life—human interest and animal shots. There is a wide range of possibilities in this field of photography, and most readers are partial to pictures showing some phase of life. The contest is limited to black and white photographs, and they should be well lighted and well composed photos with strong contrasts.

Entries for the December contest must be in the Desert Magazine office, Palm Desert, California, by December 20, and the winning prints will appear in the February issue. Pictures which arrive too late for one contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA

LETTERS

Oxygen in the Air . . .

Maxwell Air Base, Georgia

Desert:

Your comment in the September *Desert* that deep breathing in hot weather is an aid to one's comfort interested me.

When I read your statement I wondered if it could be that deep breathing increased evaporation of moisture in the lungs and hence cooled the body from the inside — something like a dog's panting keeps him cool. So far I have not found any studies on the subject. If you know of any experimental data I'd like to hear of it.

Another possibility is mentioned in *Collier's* for November 18, 1950. "Keep up with the World," page 8, quotes a U.S. Government report (title not given) as saying:

"There is less oxygen in a cubic foot of hot air than in the same amount of cold air.

"Oxygen is of course a vital requirement: its restriction even in small amounts over a long time may either diminish the effectiveness of all bodily functions or force the body to learn to use the available oxygen more efficiently. There is some indication that both effects probably do occur, but their full significance for tropical acclimatization, if any, remains to be explored."

Apparently there are still interesting possibilities to be explored concerning man's ability to get along in the desert.

ALONZO W. POND

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Comments of a Reader . . .

Portland, Oregon

Desert:

I have been a reader of *Desert* from the start and it has gradually improved in reading and general appearance. Your addition of color was an improvement, and I am sure if it were used on the inside would help the appearance, too. Keep up the quality of paper stock. I sometimes think the Rockhounds get too much space, but I know that they represent thousands of outdoor people, too.

I am a retired pharmacist, retired mountain climber and retired botanist. You may have read of the Leachs in the *New York Botanical Magazine* or *Horticulture* (Boston), or *Christian Science Monitor*. The story of the four boys on Shiprock is a good one and Douglas Kelly is a good writer and knows his climbing language. But the

picture of Erik Barnes rappelling with bare legs is unusual. Good climbers do not generally expose their legs that way. The other pictures were fine.

I noticed that you put the "Petri-fied" coyote in quotations. It might better be called mummified or just dried—but it is news just the same. We read the stories of animals, people, adventures in living on the desert and the poems. I'm glad to see Tanya South back in September's issue. We like stories of Indians and would like a good long story of John and Louisa Wetherill. They were great people.

JOHN R. LEACH

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Would Retain Boating Trips . . .

Los Angeles, California

Desert:

In your column, "Just Between You and Me," August issue of *Desert*, you express the opinion a "swap" for a more accessible area in Utah would be preferable to preserving the canyons of Dinosaur National Monument.

Though my visits to that state have been brief, I fully agree Utah has some superlatively colorful and scenic areas which should be protected from devastation.

However, where in any of our present monuments can one experience anything comparable to the boating trips on the Yampa and Green Rivers. The trip through the Lodore Canyon is an exciting and memorable experience and under the guidance of competent boatman is not a hazardous undertaking.

If for no other reason, it does seem that Dinosaur's rivers should be preserved and developed for the enjoyment of those who derive benefit, both spiritual and physical, from this form of recreation. No information has reached me that the access roads cannot be improved and extended, and the trails laid, so that the monument would be more accessible.

LORETTA MIESS

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Protect Our Natural Beauty . . .

Ontario, California

Desert:

Our government and those who are responsible for making some of the important areas of our country into National Monuments, are indeed worthy of praise. The protection of this beauty from the destructiveness of mankind is so important, for without it, there would soon be little beauty left to enjoy.

I have been amazed at the destructiveness of travelers in these protected areas. Many are just thoughtless, and when informed of their negligence, cooperate. However, others are sometimes rude and belligerent. Only those

who are selfish would deliberately destroy our natural beauty.

On one occasion, in a Monument area, five persons emerged from a car armed with shovels, pliers and sacks intending to carry off a 16 inch mound cacti in bloom. When I informed them of the law and penalty for this action, they drove away without the cacti, but were furious at such a restriction. Fortunately, I don't think we have too many like that.

EMERSON HEER

• • •

English Sparrow Problem . . .

Joshua, California

Desert:

How can we get rid of English sparrows? They are back again, and as usual the other birds — the cactus wrens, desert sparrows, flycatchers, even linnets and woodpeckers, have gone. It has been suggested that we use poison bait, but we feel it is too dangerous for other wild life. Can *Desert* readers suggest an answer to our problem?

HERBERT and ANNE BROWN

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Deming, New Mexico

Desert:

In the May issue, Gilman Taylor of Barstow, California, asked about rattlesnake markets. If Mr. Taylor is interested in capturing them for sale, I would suggest he contact Don Shupe of Socorro, New Mexico.

JERRY REESE

PAPAGOS FEAR LOSS OF LAND TO WHITE MINERS

Papago Indians of Southern Arizona may be in danger of losing parts of their reservation. John Denton, a Tucson attorney at a meeting of the Association for Papago Affairs said the Papagos are the only tribe on a reservation in the nation which does not have the right to minerals under the land. This provision was made by President Woodrow Wilson when he set aside the two million acres as a reservation in 1916.

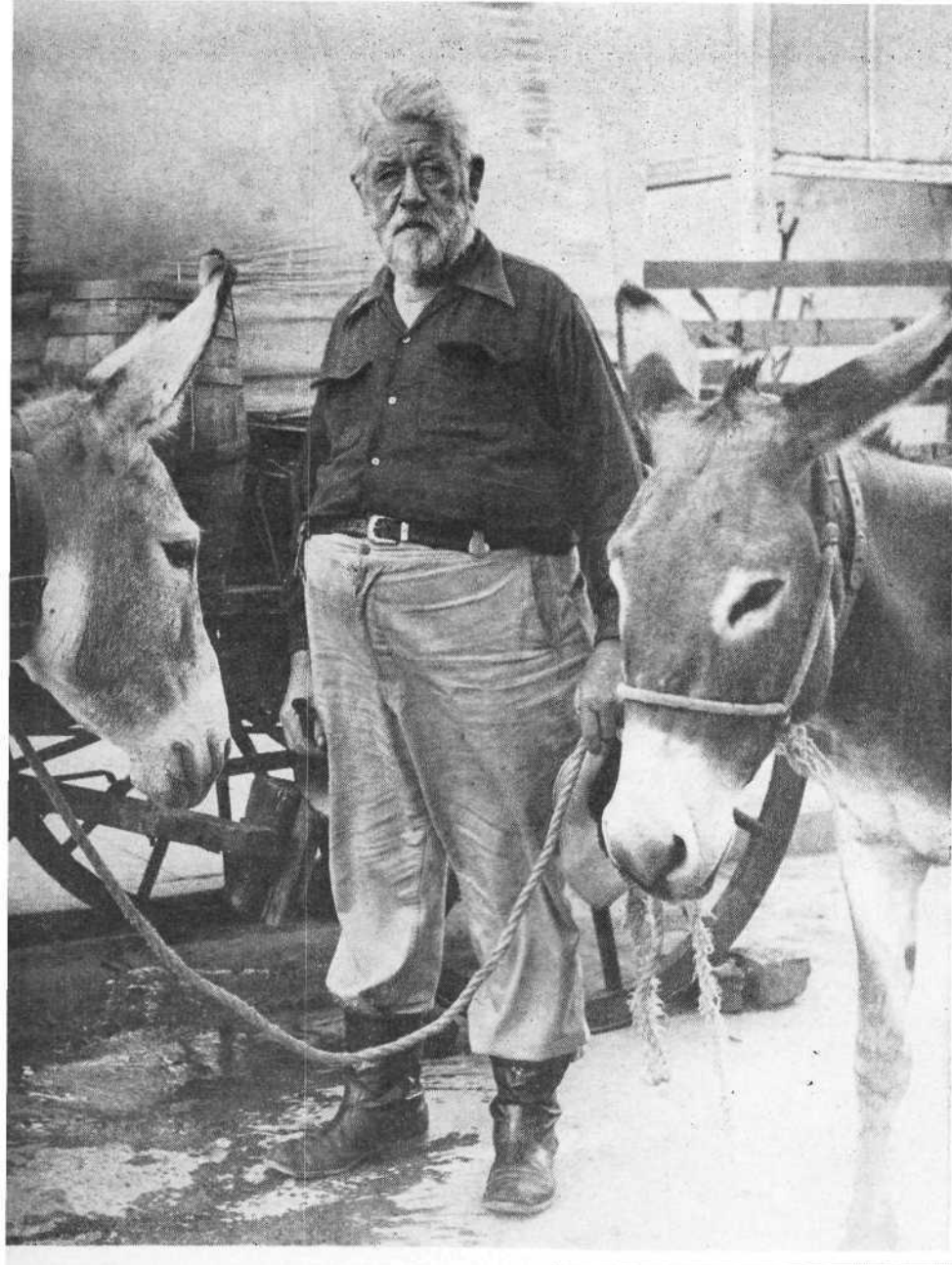
Though various changes have been made in Indian affairs bills, each time a rider has been added denying the Papagos mineral rights. As a result, it is now possible for prospectors to stake out land on the reservation and if they can prove there is mineral under the stake, can file a claim and work the land. Miners with claims on the reservation can cause hardship for the Indians by forcing them to move.

The Papago Indians are especially concerned because of the large scale uranium hunts being staged in various parts of the state. Every time a plane flies over the reservation, the Papagos worry for fear it might be carrying a geiger counter.—*The Phoenix Gazette*

PICTURES OF THE MONTH

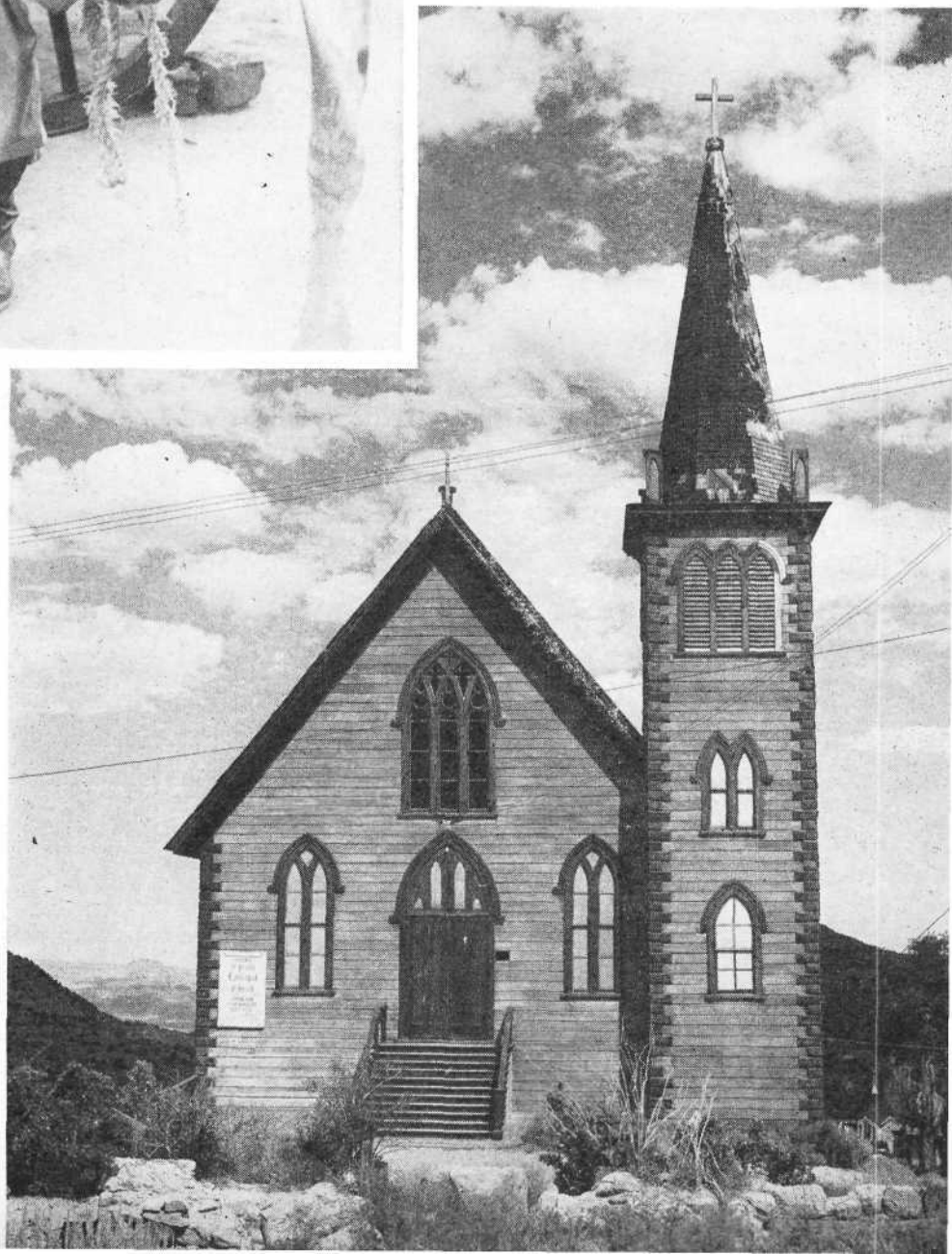
"Pop" Clanton of Jerome

This fine photograph of the prospector of Jerome, Arizona, won Robert J. Bocek of Scottsdale, Arizona, first prize in Desert's Picture-of-the-Month. Taken with a Rolliflex 3.5, Plus X film at f. 11 in 1/100 second.



Virginia City Church

Age and serenity are reflected in this photo taken at Virginia City, by Nicholas N. Kozloff of San Bernardino, California. Awarded second place in the contest, the picture was taken with a 4 x 5 Speed Graphic, SXX film with G filter at 3. 32, 1/50 second.



Mexican Christmas . . . at Douglas

In Douglas, on the Arizona-Sonora border, there is enacted each year a simple and touching Christmas drama in which the Mexican working people and their children play the roles of biblical characters. This is the procession of Las Posadas—a ritual which originated in the teachings of the padres who first brought Christianity to the desert Southwest.

By JESSIE KENNEDY

Photo by Ray Manley

ONE DECEMBER evening in my home town of Douglas, Arizona, I heard the chant of strange music. It came from the outskirts of town, where the streets wind off into the desert and become mere trails through the scrub brush which grows on hillsides.

I went out to the gateway. Coming down the roadway I saw a cluster of figures in some semblance of formation. Many lighted candles were held high, their flickering lights casting weird shadows on the marchers.

It was a procession—the enactment of the first Christmas as interpreted by the devoutly religious Mexicans of our community—*Las Posadas* they call it.

As the procession passed my gate I could dimly make out two leaders, a man and a woman, each carrying a statue. Following them, two by two, were the candle-bearers. The women were modestly draped in dark shawls with *rebozos* on their heads. There were boys and girls of all ages, some too small even to carry candles. The men wore working garb—jackets or sweaters over Levis. They were singing as they marched.

I recognized some of them — my neighbors in Douglas. There were Rosario and Laurita. Old Pablo was stumping along with his cane. Then came Roberto and his *esposa*, Rosita. Lorenzo and Mercedes were holding the hands of their little ones, Conchita and toddling Manuelito.

I followed them to a lone adobe house, with lights streaming from its tiny windows like beacons. At the doorway the marchers, tired from their long walk, broke ranks and clustered about the doorway. The door remained closed.

Then as from a signal, those waiting outside raised their voices in a kind of wail. The leaders held out the statues



In this Christmas drama, Joseph and Mary are symbolized by statues carried by the singing processionists.

in supplication. They were asking *en nombre del Cielo*, in Heaven's name to give lodging to *Maria* and *José*, "come fatigued from afar."

As from an invisible choir an answer poured out in song from within the house. The words were the age-old answer of the innkeeper who did not recognize the Holy Travelers, "Go away, there is no room in this inn."

"Shelter we ask you. I am *José*.

This is *Maria*, the mother-to-be of Jesus," outside they sang with reverent pathos.

The answer came back: "Why should we give haven? You may be thieves."

The door of the adobe remained closed. The little group of people outside the house disbanded and began to go quietly to their homes.

Even to the uninitiated eavesdropper

it was the prelude to the Christmas story. Would it be continued?

"Yes, we will make another *Posada* tomorrow night," Pablo answered my anxious question. "And the night after, until Christmas."

"*Es costumbre*," it is the custom, Pablo went on to explain. "It is *Las Posadas*. You would call it the Search-of-the-Inns."

The night of December 16 is the beginning of the Search. For nine nights the begging continues from house to house. It commemorates the long and weary journey of Mary and Joseph across the desert and celebrates the birth of the Christ Child in Bethlehem.

Mary and Joseph are symbolized by plaster statues. Nazareth is the neighborhood from which the actors gather. The roadway into our town from the south becomes the countryside of Judea. The adobe houses selected by the neighbors and friends represent *las posadas*, the original inns which refused shelter. *La Posada*, the ninth adobe house chosen for the final scene, stands for that Inn of Bethlehem where the Blessed Babe was born.

The ninth night of *Las Posadas* is *Vispera de Navidad*, Christmas Eve. On that evening, the neighbors gather together for the last procession and are in gala dress. The shawls are gay and *mantillas* replace *rebozos*. Two little girls wear white and the wings of angels. Several boys carry shepherd-crooks and wear jumpers made of sheep skins. Looking as if suddenly called away from their flocks in the hills, they portray those first shepherds who followed the Star. The *Mariachis* with their guitars and violins and gourd-shakers have joined the expedition. These strolling players wear beaded jackets, bright sashes, braided bell-bottomed trousers, serapes thrown gracefully over shoulders, high-crowned and broad brimmed *sombreros* securely anchored by chin cords.

To the music of the strings the marching song changes to a lively tempo. The wayfarers seem to dance along the road. When they arrive at the brightly lighted adobe which is the *Posada de Navidad*, the Inn of the Nativity, they announce themselves triumphantly as *Maria y José*.

"Enter honest *José*, enter with *Maria*," sing the hosts in welcome, this time opening the door.

The leaders place the statues of Mary and Joseph by the crib which stands in the corner of the living room. As the image of the Infant Jesus is placed in the straw of the manger, every one kneels in prayer. Then the

Cánticos de Navidad, the Christmas hymns and litanies ring out.

To these faithful and simple people, *El Niño*, The Child is indeed born again each year.

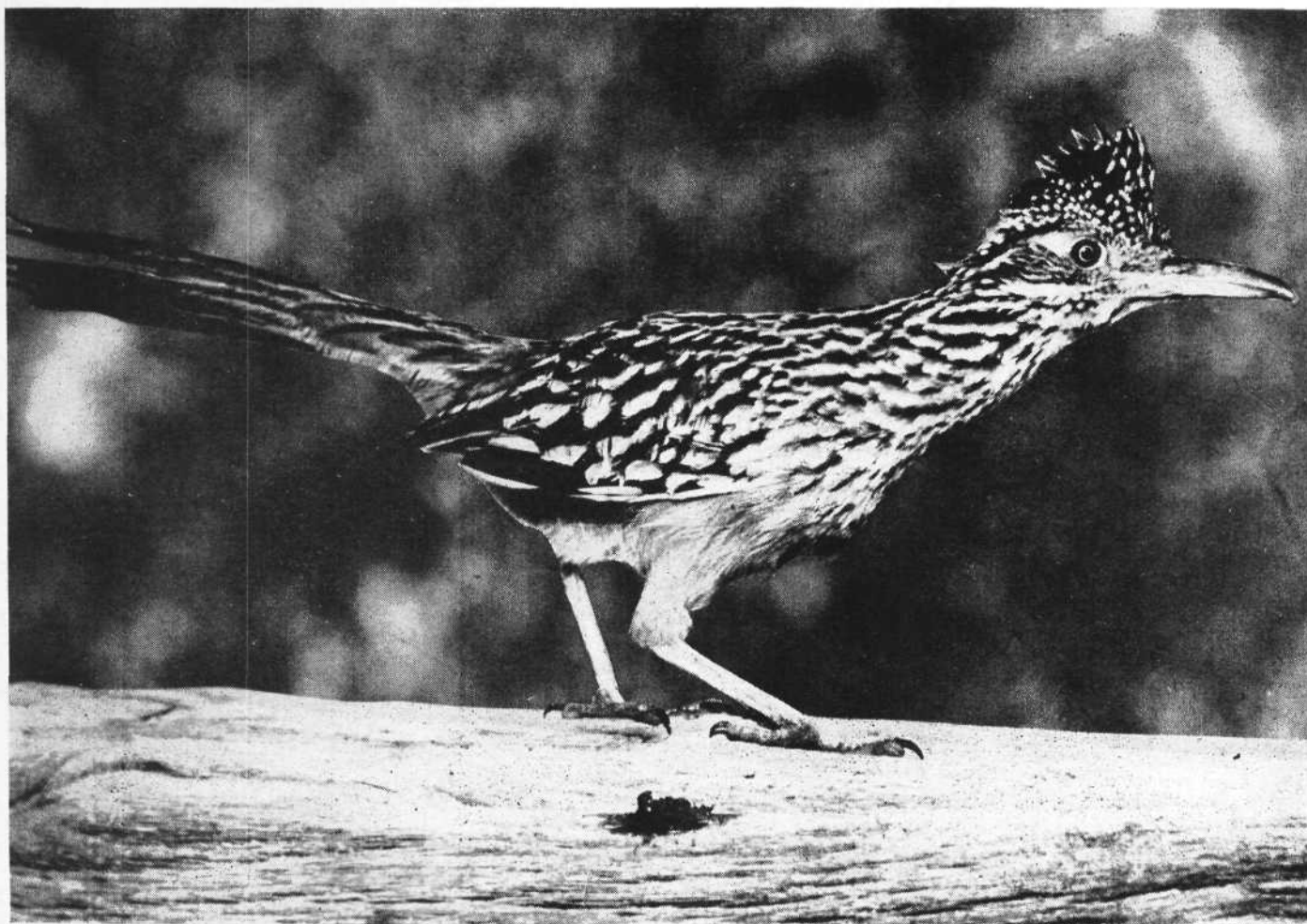
At midnight above the strumming of guitars, the Christmas greeting, *Feliz Navidad!* comes from everyone's lips. This is the call to fiesta.

The Mexicans who sing their sorrows and sing their joys give us Christmas as it was handed down by their padres. Their fathers learned it from *Las Posadas*, the miracle play brought from Spain so long ago. Thus in this desert town the customs of the Old World survive.

Desert Quiz

This month's Desert Quiz is a break for the tenderfoot—it's easier than the average. But it covers a wide range of subjects—geography, history, botany, Indians and the general lore of the desert country. Twelve to 14 is a fair score, 15 to 17 is good, 18 or over is excellent. The answers are on page 45.

- 1—Highest mountain in the United States is in—Arizona _____. California _____. Nevada _____. New Mexico _____. Utah _____.
- 2—Indian signs incised in the rocks properly are called—Petroglyphs _____. Hieroglyphs _____. Lithographs _____. Pictographs _____.
- 3—Pyramid Lake is located on the reservation of the—Pima Indians _____. Navajos _____. Paiutes _____. Hualpais _____.
- 4—An Indian wickiup is a—Dwelling _____. Type of boat _____. Basket for storing food _____. Ceremonial headdress _____.
- 5—Roosevelt dam is constructed in the—Colorado River _____. Gila River _____. Salt River _____. Virgin River _____.
- 6—The Joshua tree is a species of—Yucca _____. Palm _____. Fern _____. Catalpa _____.
- 7—Jacob Hamblin was a—Guide for Kearny's Army _____. Mormon missionary _____. Mining engineer _____. Stage driver _____.
- 8—San Xavier del Bac in Arizona is the name of a — Mountain Range _____. Postoffice _____. River _____. Old mission _____.
- 9—The Indian cliff dwelling known as Montezuma Castle is in—Arizona _____. New Mexico _____. Utah _____. California _____.
- 10—Correct spelling of one of the most common plants on the desert is—Ocatillo _____. Ocotilo _____. Ocotillo _____. Ocotilla _____.
- 11—A traditional Navajo hogan always faces the—North _____. South _____. East _____. West _____.
- 12—Bisnaga is the name of a desert—Reptile _____. Bird _____. Rodent _____. Cactus _____.
- 13—Palm Springs, California, is located at the base of—Mt. San Jacinto _____. San Gorgonio _____. Telescope Peak _____. Turtle Mountains _____.
- 14—Casa Grande Indian ruins in Arizona are under the administration of—National Park Service _____. Federal Indian Bureau _____. Arizona State Park system _____. Pima tribal council _____.
- 15—Moab, Utah, is now the hub of rich—Gold mining operations _____. Silver mining _____. Tungsten _____. Uranium _____.
- 16—An Indian metate is used for—Grinding meal _____. Killing game _____. Herding sheep _____. Driving out evil spirits _____.
- 17—The Bill Williams River is entirely in—Arizona _____. Nevada _____. California _____. Utah _____.
- 18—*Camino* is a Spanish word meaning — Mountain _____. Dwelling place _____. Horseman _____. Highway or road _____.
- 19—The annual Don's Trek each year at Phoenix has as its destination—Camelback Mountain _____. Roosevelt dam _____. Superstition Mountains _____. Tombstone mining camp _____.
- 20—The book, *Wonders of the Colorado Desert*, was written by—George Wharton James _____. Chase _____. Van Dyke _____. Saunders _____.



The Roadrunner—clown among desert birds. Photo by George M. Bradt.

Clown of the Wastelands . . .

The Mexicans call him Paisano, but to you and me he is the Roadrunner—a rugged individualist in his native habitat, but a friendly neighbor with a fine sense of humor under the proper circumstances. Dr. Jaeger tells of his strange experiences with this bird with wings which it seldom uses.

By EDMUND C. JAEGER, D.Sc.
Curator of Plants
Riverside Municipal Museum

NEARLY SIX years ago on a warm summer morning I was driving over the arid brush covered hills of southern Riverside County in California. I thought I was in an almost wholly uninhabited area when all at once I dropped over a hill and virtually into the dooryard of a family whose friendliness was at once apparent.

Their house, set among giant granite boulders, had beside it a garden plot planted to corn, beans, and melons. One of the small boys rather

shyly came up to me with a pet roadrunner held in his arms. "That's our Old Rody, mischievous Old Rody," said the mother. "The children just have to show him to everybody. He's such a big clown, so sociable and chummy, everybody likes him."

The bird sprang to the ground and made off to the brush, no doubt disturbed by the presence of a stranger. "The boys brought him in from out in the brush where they found the nest while he was just a little chick. He soon got used to us and has hung

around ever since," continued the mother.

"At night he stays in the house with us, roosting either on the limb of a piece of brush we put up in the corner for him or upon the top of our iron-case clock. When he roosts on the clock it is funny to watch him as he backs his tail up against the wall and then squats down on the clock-top with his head facing us. He never seems disturbed either by the ticking of the clock or the loud striking of the gong each hour. The strange thing is that he goes to bed regularly just when

its dusk and doesn't mind when we walk about in the room with all lights on or carry on conversation.

"He's up soon after daylight begging to get out-of-doors. First thing we know he's up on one of those boulders taking his sun bath—feathers all puffed out and often with tail hanging down and wings spread out. He basks in the sun for about 15 minutes then goes for his morning frolic. He jumps or flies from boulder to boulder about as fast as he can, clownishly tipping his body from side to side; then slips to the ground and runs at breakneck speed around and around one of the big rocks or a clump of cactus. After this bit of clowning he usually makes for the brush and we may not see him again until noon—probably because he's out hunting for his breakfast of beetles, grasshoppers, crickets, and lizards. Sometimes he devours horned toads. He seems to prefer the big insects, not the little ones. At times he comes down to the house to eat watermelon and scraps of meat I have saved for him. If the cat's around he spends a lot of time annoying her by dashing up to her while chattering his beak. If he gets too fresh and very close she tries to strike out and bat him with her paw but never yet has she hit him. Old Rody's just too quick even for a cat.

"There's one animal he doesn't fool with, that's the dog. He's afraid of even the smallest pup.

"Old Rody has a great time when I sprinkle my weekly wash. He loves to have me dash a few drops of water on him too. If he can find a piece of cotton or a fuzzy milkweed seed out in the yard, he brings it in his beak and with head held high runs all over the house with it. He sometimes goes out in the garden and brings in every thing from bits of leaves to broken glass. He frightened a neighbor when he came up to her carrying in his beak a living snake. Her screams only seemed to amuse him. Our neighbor's little children think Rody's about the worst ever. If he comes upon them while they are barefooted he dashes up with chattering beak and begins to peck at their toes. If they have on shoes he goes after the buttons."

I asked, "Does he ever go away from home?"

"He's a regular bum," spoke up one of the boys. "Sometimes he goes as far as a mile away calling in turn on all of our neighbors. Often he acts just as silly at their houses as he does at ours. They all know and love him."

Several days later I again visited the little farm where Old Rody lived. But when I arrived there were sad hearts among the children. They had just

discovered their pet caught in a trap put out to catch rabbits which were eating up the garden. Old Rody had caught one foot in the trap and it was almost severed by the claspings jaws of steel. They begged me to tell them what could be done. When I saw how the foot was dangling by a mere piece of skin I told them that the only thing to do was to amputate.

"But then our Rody can't run and hunt any more. He'll die if he can't run won't he?"

I assured them that while he might not get around like he used to, he'd probably get along on the stump very well even as I'd seen stump-legged blackbirds do.

While the roadrunner was held by one of the boys, with scissors I removed the foot. We put mercuriochrome on the stump, bound it with adhesive and put Old Rody in the shade. There I was told he stayed for several days while "thinking it over." As the stump healed he made attempts to run by putting it to the ground. Relying more upon his wings and less on his legs, he soon was back at his hunting again, even doing most of his old tricks and making visits to the neighbors.

This taught me how really resourceful and intelligent a roadrunner is. Every new experience I have with this remarkable bird makes me admire more and more its sagacity.

Not long ago I was walking over some flat ground among the mesquite thickets near the Salton Sea. As I parted the brush I came upon a clearing where the clay was full of deep cracks. The blocks of dried earth in between the fissures had separated into great laminated flakes curled up around the edges. In the middle of this open space I noticed a roadrunner with his long beak prying up and then actually turning over these warped clay plates. As often as he turned over a clay plate a cricket which had been hiding beneath the curled-up edge, jumped out only to be gobbled up by the clever bird.

Sometimes he came upon a winged insect that attempted escape by flying. These he sprang at and dextrously snapped up in mid-air before it had gotten three feet away.

The keen eye of the roadrunner scanning a bush will see well camouflaged cicadas which I cannot detect. At one of my desert camps where I stayed for nearly a week a roadrunner often came to pick up food scraps I had purposely thrown out for him. Then he would go hunting for insects in the brush around the camp. I searched the brush with my binoculars, but could see nothing. But his keen

eyes saw food there. Repeatedly he would leap up and grab a cicada and another and another.

Roadrunners are great dust bathers. Often I see where they have "wal-lowed," fluffing their feathers and flipping their wings to better stir up the fine dust particles. It is their way of suffocating parasitic ticks and biting bird lice.

The fun-loving paisano is a born gamester and enjoys out-witting birds of prey. Not long ago I saw a roadrunner make sport of a Marsh Hawk which evidently intended to make meat of him. The Marsh Hawk at times is given to hunting on the ground. When I came upon the two birds the roadrunner was going around and around a creosote bush while his avian enemy was doing a dashing half-run, half-fly in pursuit. Each time the hawk about caught up the roadrunner deftly slipped over to another creosote bush and let the ludicrous merry-go-round chase go on again. He seemed to be enjoying it highly. After eluding the enemy for three or four minutes the strong legged roadrunner ran off at a tangent into some thick brush and the surprised hawk disgustedly gave up the pursuit.

I have not seen a great number of roadrunner nests but all I have discovered were of the same pattern—a bunch of loose sticks haphazardly put together on the branches of a cactus, a mesquite tree or scrub juniper. Like some of the tree-dwelling cuckoos the ground dwelling roadrunner, also a cuckoo, lays its eggs at intervals but may begin to incubate as soon as the first one is laid. This means that the young are often different sizes and ages. The hen is a close "sitter" and always because of her somber colored, striped body, well camouflaged. If disturbed she slips off the nest with a cleverness that always amazes.

This unique bird of the plain and brush covered arid mountain borders is almost what we call unsocial; seldom do you see two together. But once you have seen one you may be almost certain to see it many times in the same vicinity. The hunting ground seems fairly well restricted.

On recent trips to Sonora and Chihuahua in Mexico, I found the roadrunner much more common than in any parts of the southwestern United States. In Mexico one may frequently see eight or ten of the birds in a day's ramble. In our country this fine bird is becoming rarer and rarer. Like a Beduin it loves the wild open spaces. It is the unusual paisano that takes up residence near human habitations, but when he does he makes of himself a good and quiet neighbor, amusing you with his unpredictable tricks and

Here and There on the Desert...

ARIZONA

Giant Telescope Moved . . .

FLAGSTAFF — The navy's giant reflector telescope will be moved from Washington to a site atop a peak near Flagstaff. \$156,800 will be spent to construct facilities to house the 40-inch scope. The move was sought by navy scientists to take advantage of Northern Arizona's clear atmosphere. The reflector telescope, considered one of the finest of its kind in existence has been in operation at the observatory in Washington since 1934.—*Phoenix Gazette*

odd ways and giving you opportunity at early morning to hear his strong and forceful trumpeting cuckoo-like call.

The fleet running Chaparral Cock, as this bird is sometimes called, was first brought to the attention of American naturalists by Dr. William Gambel who published a description of it in 1845. This is the same William Gambel after whom the sweet-singing Gambel Sparrow, a winter visitant in much of the southern desert area, is named. The Gambel Quail, appropriately called the Desert Quail, so common in the creosote bush deserts, also commemorates in its name the brilliant young Philadelphia naturalist who visited the southwestern United States near the middle of the nineteenth century.

I recently heard a roadrunner's call at mid-day in May. He was sitting atop a mesquite in the park at the headquarters building of the Joshua Tree National Monument. It is the only roadrunner's mid-day vocal effort I have ever heard.

A recent newspaper article tells of an effort of so-called sportsmen to again get the roadrunner off the list of protected birds. Their argument was that roadrunners eat many baby quail, therefore the hunters should be allowed to kill them off. Like so many arguments put up by thoughtless and selfish persons, this one is based on hearsay, and is a willful distortion of fact.

As far as feeding habits are concerned the roadrunner is a most exemplary bird; occasionally it may eat eggs of small ground-nesting swallows or even a young bird, feathers and all, but the great bulk of its food consists of harmful large-sized insects such as cicadas, grasshoppers, crickets, and beetles. At times insect food makes up to 90 percent of the diet; the remainder is of ticks, lizards, and occasionally a snake.

The Hard Way . . .

GRAND CANYON—Five University of Mexico geology students with their instructor Ing. Carlos Castillo Tejero, professor of geology at the school, tackled the arduous descent of the Grand Canyon the hard way—by foot. "The better to study the canyon strata and other items of geological interest," said Professor Tejero, who has made six trips to the bottom of the famous gorge. "The Grand Canyon is the best place in the world for geological studies," the professor stated and the climbing experience gained will be useful in making a descent into Mexico's Barranca de Cobre. The group will make the expedition into Copper Canyon accompanied by other geologists in March.—*Casa Grande Dispatch*

Antivenom Again Available . . .

TEMPE — Thanks to hundreds of Arizonans and an Arizona State College Professor an antivenom for black widow spider bites once again is available nationally. The fact that no black widow serum was available was first learned last March by Dr. Herbert L. Stahnke, director of the poisonous animal research laboratory at Arizona State College in Tempe, when the laboratory in Pennsylvania said they were out of spiders. He appealed to the citizens of Arizona and they in turn responded with thousands of the spiders.—*The Buckeye Valley News*

The Wandering Colorado . . .

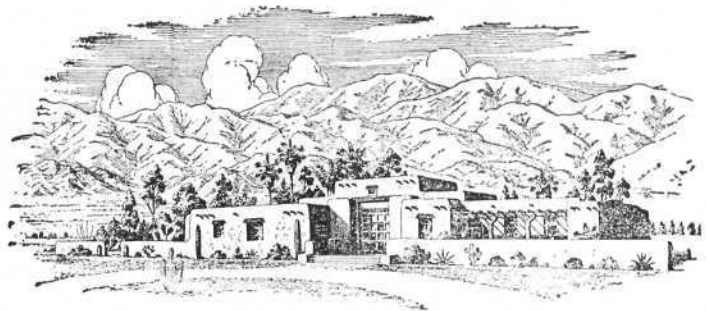
YUMA — A joint commission in search of a permanent boundary between California and Arizona has been established. Wayne Aiken of Phoenix heads the Arizona delegation, and Col. Rufus Putnam of Los Angeles is the Chairman of the California group. They will try to settle the question, "What to do about the wandering Colorado." The river once satisfied everyone as a natural boundary between the two states but shifted as much as 20 miles in the past 100 years in some spots. Engineers and mapmakers have submitted their ideas and the conferees were in general agreement except in the Cibola and Mojave Valleys above Needles and Yuma.—*Phoenix Gazette*

Increase in Canyon Visitors . . .

GRAND CANYON—Park officials of Grand Canyon report a gain in the total number of visitors during September. The figure is 95,919 compared with 92,360 a year ago. Public campgrounds remain open until the winter weather closes the approach and entrance road. The south rim remains open the year around.—*Cococino Sun*

New Campground . . .

AJO—A new campground area has been completed at Organ Pipe Cactus National Monument, with spaces for 62 trailers. Jim Eden, superintendent said, running water and comfort stations have been installed but electricity is not available.—*Phoenix Gazette*



In the spacious foyers of the *Desert Magazine's* beautiful Pueblo along Highway 111, twelve miles from Palm Springs and ten miles from Indio, in an atmosphere of the old Southwest, is presented an ever changing exhibition of the finest work of more than fifty of the Southwest's best known artists.

Visitors are always welcome at the *Desert Magazine's* art gallery, and there is no admission charge. The gallery is open seven days a week from 9:00 a.m. until 5:00 p.m., under the direction of Harriet A. Day.

Adjoining the art gallery is the Desert Book and Crafts Shop where all the current Southwestern books are available for those who are interested. Visitors may browse at will in the restful atmosphere of the gallery and book shop. The sign over the door reads: "Friend or Stranger, you are welcome here."

THE DESERT TRADING POST

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VIEW LOTS—Palm Desert Heights. Just above Desert Magazine Block. Near Shadow Mountain Club, school, church, markets, bus. 70x100, \$1200 up. Paved, gas, elec., water. Restricted. For brochure write Box 65, Palm Desert, Calif.

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MISCELLANEOUS

URANIUM CLAIMS with merit, wanted for development. Will give liberal override. Can furnish bank reference. Give detailed description of property in first letter. Rex R. Moore, 2904 Liberty Bank Bldg., Oklahoma City, Oklahoma.

INT. 4 x 4 TRUCK. Excellent condition. Cab, Winch, compressor, steel bed 4½ x 7½ x 1½ feet. \$1300. Lawrence McArthur, Box 948, Redlands, Calif.

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STEREO 3D SLIDES—Gorgeous Colorado mountain and Utah desert scenes. Realist size original Kodachromes. Sample selection four of my best stereo slides \$2.00. List free. Will C. Minor, Fruita, Colo.

SILVERY DESERT HOLLY PLANTS: One dollar each postpaid. Greasewood Greenhouses, Lenwood, Barstow, Calif.

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FREE "Do-It-Yourself" Leathercraft Catalog. Tandy Leather Company. Box 791-E7, Fort Worth, Texas.

Wants Ban on Prospectors . . .

PHOENIX—The United States Department of Agriculture is seeking a permanent ban on mineral prospecting and filing of mining claims on nearly 18,000 acres of forest lands in Arizona. The agriculture department hopes through the proposed exclusion to set aside 65 tracts in Coconino, Sitgreaves, Tonto, Coronado and Gila national forests for picnic grounds, permanent camp sites and public recreation areas. —*Morning Sun*

CALIFORNIA

Honor for Mrs. Coffman . . .

PALM SPRINGS — A portrait of the late Mrs. Nellie Coffman of Palm Springs, founder of the famous Desert Inn, will be hung in the "hall of fame" now being established in San Francisco by the California Historical Society. Mrs. Coffman's portrait will join those of Luther Burbank, Herbert Hoover and other noted Californians. —*Hemet News*

Progress of Tramway . . .

PALM SPRINGS—A meeting was called by the San Jacinto Park Authority recently, to discuss the progress of the Mt. San Jacinto-Palm Springs tramway. A consulting engineer is due to arrive soon from the east to study the traffic situation and estimate the revenue that can be expected from the operation of the tramway.

GHOST TOWN ITEMS: Sun-colored glass, amethyst to royal purple; ghost railroad materials, tickets; limited odd items from camps of the '60s. Write your interest—Box 64-D, Smith, Nevada.

DESERT TEA. One pound one dollar postpaid. Greasewood Greenhouses, Lenwood, Barstow, California.

NEW CALIFORNIA State Topographic Map 64 x 90" \$2.50. Lost mines of 10 Southwestern states, with map \$1.75. Sectionized County maps: San Bernardino, Riverside \$1.00 each, Inyo, Mono, Kern, Los Angeles 75c each. Imperial, San Diego 50c each. New series of Nevada County maps \$1.00 each. Joshua Tree-Twenty-nine Palms area \$1.56. Township blanks, all sizes. Lode or Placer location notice forms 5c each. Topographical maps in California, Nevada, Utah, Arizona and all other Western states. Atomic Energy Commission Airborne Anomaly, Uranium Location maps. Westwide Maps Co., 114½ W. Third St., Los Angeles, California.

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Borax from Death Valley . . .

DEATH VALLEY—Death Valley is noted for its toll of human life in gold rush days but it has become an important factor in the saving and prolongation of life. Borax, a famed product of Death Valley is now an important additive in many fields of chemistry. Boron, non-metallic derivation from borax is widely used in preserving fruits, making eyewash, toothpaste and many other products. Its use in fabricated wall boards creates a fire-preventive thus saving life and is used to prevent disease in vegetable and plant life. The annual production of borax in the United States is 715,000 tons; the bulk of which comes from Death Valley.—*Phoenix Gazette*

Fire Destroys Historic Palms . . .

BORREGO STATE PARK — San Diego County's largest brush and forest fire burned itself out in the San Ysidro Mountains recently after damaging over 600 historic palm trees in the upper reaches of Palm Canyon, in Borrego State Park. Flames were prevented from spreading to scenic groves of palm trees at lower levels in Palm Canyon by Park officials who stood by all night.—*Borrego Sun*

NEVADA

Monument Brings Fame . . .

FALLON—A new role is in store for Fallon and Tonopah as they will eventually become known as the gateways to the Ichthyosaur state or national monument. This was a statement made by Nevada State Park Chairman Thomas W. Miller, who recently spoke before the Rotary Club of Fallon and also commended the activities of the Fallon Rock and Gem Club in collecting funds to protect the site of the famous Ichthyosaur discovery in Nye county. He stated that too many attractions have been allowed to deteriorate and that Nevada should protect these sites.—*Tonopah Times Bonanza*

New Radar Station . . .

WINNEMUCCA — Winnemucca Mountain will be the location for the new \$716,188 Air Force radar station. Road improvements to the top of the mountain will also be made.—*Humboldt Star*

More Skeletons Uncovered . . .

FALLON—A total of 11 specimens of Ichthyosaurs have now been uncovered in the Berlin area near Ione. The skeletons of the pre-historic animals are at four different levels in one small acreage, uncovered to a depth of 15 feet by a crew working under the direction of Dr. C. L. Camp of the University of California.—*Reese River Reveille*

Museum Is Tourist Attraction . . .

CARSON CITY—A brief history of the work undertaken and a look into the future of what may be one of the West's outstanding museums was the report given by Judge Clark J. Guild, chairman of the board of the Nevada State Museum. The museum occupying the former United States Mint which was up for sale by the Treasury Department when Judge Guild requested that the state be given the opportunity to purchase it, is an outstanding tourist attraction. Last year over 140,000 visitors toured the building. The late Major Max Fleischmann's contribution—a 300 foot-long mine under the building, true to scale is one of the main attractions. Judge Guild urged every Nevadan to take an interest and see that historic Nevada items be given to the state museum.—*Fallon Standard*

Lahontan Reservoir Water Low . . .

FALLON — The Lahontan Reservoir level is still dropping and will probably hit the low storage point of 60,000 to 70,000 acre feet reports Harry Richards, Watermaster. The Carson River flow into upstream Buckland ditch is increasing, however water is not coming down to Lahontan and probably will not until upstream storms occur. The district hopes to maintain a flow of 400 second feet in the Truckee River all winter which will be possible if Lake Tahoe's level remains high enough. Although an adequate water supply will be assured locally by a normal winter, there will be no oversupply unless the Sierras have an unusually heavy winter, the water master said.—*Fallon Standard*

NEW MEXICO

Hopi Chamber of Commerce . . .

GALLUP—Hopi Indians are considering a Hopi Chamber of Commerce. Willard S. Sakeistewa, secretary-treasurer of the Hopi Tribal Council in letters to chambers of commerce in many Southwestern towns states that many of the younger generation feels the organization would help to bring modern business methods to the tribe.—*The New Mexican*

Needs New Roads . . .

SANTA FE — The New Mexico highway department is appealing to the federal treasury for money to construct new roads. The highway department in stating its position said the state has long suffered an inadequate road system because of its obligation to build and maintain long routes to carry the traffic of other states. Gasoline tax from such traffic falls short of meeting the cost of the

roads. New Mexico is a corridor state between Texas with the fourth largest automobile registration in the nation, and California with the highest. New Mexico ranks fortieth but must build roads to handle the volume of neighboring states.—*Artesia Daily Press*



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Canyon May Be State Park . . .

CIMARRON CANYON—Northern New Mexico's spectacular Cimarron Canyon is being considered for development as a state park. The site has long been one of the state's more popular fishing spots. State Park Commissioner, Lee Robinson said that when use of the area becomes great enough arrangements will be made for his office to take over jurisdiction from the Game and Fish Department for park development and construction of camping and picnicking facilities. — *The New Mexican*

Problem for Ranchers . . .

ESTANCIA—Prospecting in every corner of the state is creating a serious problem for ranchers reports Sher-

wood Culbertson, president of the New Mexico Cattle Growers Association. Amateur as well as experienced prospectors have been invading ranches using every type of transportation from the burro to the airplane. Ranchers are asking that prospectors contact ranch headquarters to determine the ownership status of the lands on which they are trespassing, to keep gates shut, prevent grass fires, avoid molesting livestock and to follow other simple courtesies. — *Torrance County News*

Gift for Santa Rosa . . .

SANTA ROSA—The Rock Island Railroad has donated to the city of Santa Rosa property worth \$250,000. It includes three lakes and a water system. Indian dances and old-time Spanish dances were a part of the celebration held at the little "City of Natural Lakes." This gift may be the start of a new era for Santa Rosa. — *Santa Rosa News*

Water Consuming Cedars . . .

CARLSBAD—Plans are being made to cut a channel through the salt cedars that clog the Pecos River. The Pecos River is vital to a large area in New Mexico. Loss of water to salt cedars, excessive saltiness in places and other problems have plagued engineers for years. The decision was made after a great deal of discussion as the cedars screen out sediments which otherwise would enter Lake McMillan and other reservoirs, but at the same time they consume great amounts of water. — *The New Mexican*

UTAH

Monument Ranger Passes . . .

VERNAL—Dinosaur National Monument lost its chief ranger, Charles E. Smith 47, who died of a heart ailment. Mr. Smith was employed by the National Parks service for 14 years and came to Vernal from the Teton National Park, Wyoming, where he served as district ranger. He had served at Dinosaur National Monument since September 1, 1953. — *Vernal Express*

Prosperity for Ute Indians . . .

BLANDING—New homes are being built on the east side of the highway between Blanding and Bluff by the Ute Mountain Rehabilitation program. The funds for this project are set aside by the Tribal officers with the Indian Service acting in an advisory capacity. Efforts are also being made to start the Ute Indians in the livestock business. A land purchasing program is now underway as the Indians do not have enough land to become permanently established. The tribal officials are making every effort to make the Utes self-sustaining. — *San Juan Record*

Unusual Fossil Track . . .

MOAB—A discovery of unusual interest was made by engineers in the Coyote Wash area. An engineer gathering rocks found a track imprinted on the surface of one of the rocks. Study and investigation by Geologist B. Geekie Cobb estimated it to be the track of one of the first flying creatures, made about 175,000,000 years ago. It stood five feet tall and although it flew had no feathers. This creature, a type of reptile, lived long before the time of the dinosaur. — *The Times Independent*

Protection for Wilderness . . .

HIGH UINTAHS—Regional Forester C. J. Olsen reports that U. S. Forest Service is having difficulty in keeping vehicles out of the High Uintas primitive area. These forests were set aside to maintain wilderness values free from artificial influences and are valuable not only for recreation but for long-term scientific observations as well. They are open to hiking, riding, camping, mountain climbing, nature study and just plain enjoyment, but they are not to be traversed by automobiles or jeeps or their wilderness spoiled by lodges, cabins or hot dog stands. The High Uintas comprise 243,957 acres of timber, meadow, water and mountains. Strong measures are being urged to stop this violation by jeepsters so that this beautiful wilderness can be kept in its natural state. — *Salt Lake Tribune*

Petition for New Monument . . .

PROMONTORY—A petition has been presented to the National Park Service asking that the Golden Spike site at Promontory be made a national monument. This site was the meeting of the east and west trains in 1869, the historic completion of the first transcontinental railroad. Pictures have been taken in black and white and in colored slides for presentation to stress the present neglect. Governor Charles H. Russell of Nevada, Governor Goodwin S. Knight of California, the Utah Historical Society and several other organizations support this move. — *Box Elder News*

Scenic Highway Finished . . .

CEDAR CITY—The long-sought highway connecting U.S. 91 and 89 is now completed and a scenic loop trip to Utah's national parks and Cedar Breaks National Monument can now be enjoyed. A \$485,000 paving job is now finished and the 43 mile road designated as Utah 14, which links Cedar City with Long Valley Junction provides access to Cedar Breaks, Navajo Lake and miles of high plateau and mountain country in the Dixie National Forest. — *Salt Lake Tribune*

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GEMS and MINERALS

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Quartz and chalcedony are the lapidaries' delight and from them are fashioned more gems, both cabochon and faceted, than any other gem material. They are cheap, abundant, of large variety and color and hard enough to cut well and take an easy, lasting polish. This chemical union of silica and oxygen produces clear quartz crystals, star quartz, rose quartz, smoky quartz, amethyst, citrine, aquamarine, cat's eye, tiger eye, aventurine, chrysoprase, quartz containing inclusions of rutile, tourmaline, asbestos, actinolite and other minerals, clear chalcedony, chalcedony in various shades of red, blue, green and brown, opal, common and precious onyx, sardonyx, petrified woods, jaspers in a multitude of colors, and agate including banded eye, moss, iris, flame, plume and variegated.

Some of the quartz and chalcedony came from volcanic hot springs, brought out by hot waters and deposited from solution. But most of it was cast out from the original magmas that formed the rocks of the earth's crust. Excess silica not needed in rock mineral formation was forced to the top of the magma chamber, there to collect with other excess elements and much water into a silica rich mother liquor, or residual magma. When the magma finally consolidated into rock, this mother liquor still liquid due to its water content was forced out into cracks and crevices of the enclosing country rock. They were very hot and as they traveled through the openings in the earth's crust, deposited their minerals in their order of solubility as they cooled down, with quartz and chalcedony being the last to go out of solution. It's color is due to the oxides of the metals, and other substances it came in contact with in its journey through the rocks. Excerpts from an article by Charles W. Clark in the *Rocks and Gems*, the San Fernando Valley Mineral and Gem Society monthly bulletin.

The Delvers Gem and Mineral Society of Bellflower, California, planned a field trip October 23 and 24 to Shark Tooth Hill about 10 miles N.E. of Bakersfield, up the Kern River. Dale Clifford reported in the *Delvings*, the Society's publication that this deposit, while now on the side of a hill was once the bottom of the great inland sea which covered what is now the Sacramento and San Joaquin Valleys. When this area dried up, it was probably the last puddle of water, which accounts for the millions of teeth deposited there.

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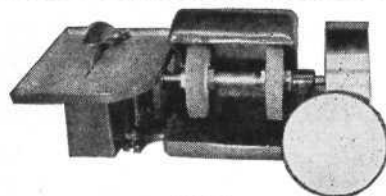
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NEW GAME TEACHES ABOUT GEM STONES

Credit for a new program which is being enjoyed by members of the San Diego Lapidary Society goes to a new member, Blanch Wright, who has found a painless way to learn about mineral and gem materials. The program is patterned after the T.V. program "What's My Line" and is called "What's My Rock."

A panel of four members for each rock is chosen, with a master of ceremonies and a "professor" who checks the books on the harder questions. A half-hour is allowed for the program, or three stones—which ever comes first. The panel is first placed facing the wall while the material or a sign with the name is shown to the members. Then the panel is turned around to face the members and the fun begins. Such questions as "Is the mineral over 7 in hardness? Is it found locally? Is it a rare Mineral? Can it be faceted? etc., are asked. Excerpts from an article by Ed Soukup, in *Shop Notes and News* monthly bulletin of San Diego Lapidary Society.

At the first Community Fair in Las Vegas, members of the Clark County Gem Collectors planned to display rocks and minerals October 20-24. Their field trip was to be held October 16 and 17 at Bullhead, Arizona, near Davis Dam, where a construction company left large piles of river rocks. Members expected to find fire agate, quartz crystals and garnets.



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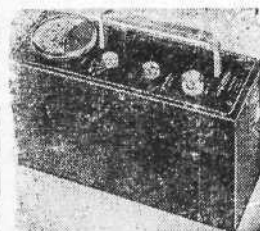
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Recalling the two field trips we made to New Harmony and Vincennes, it is a bit difficult to picture the conditions which caused the pebbles we found to be in southern Indiana. But the numerous kettle lakes and bogs in northern Indiana, the striated bedrock and even scratched pebbles all bear witness to the advance and retreat of this huge body of ice.

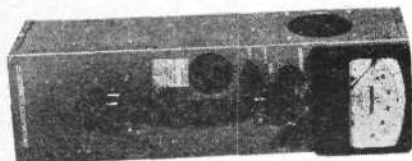
Such a moving mass was a most effective eroding agent—a huge plane literally sciving off the surface of the earth over which it moved. It was also a huge conveyor belt which carried with it all that had been removed. What it carried south it could

not take back and the debris of its labors was scattered over the earth beyond its marginal limits. In the glaciated part of Indiana the original bedrock is covered by many feet of outwash and eroded soil. If we could see those bedrocks we would note scratches, pits, grooves and chatter marks which the ice made on its movements south. Thus it is that Harrison County Flint is our only gemstone found in place in Indiana. Excerpts from the Evansville Lapidary Society's monthly *News Letter*.

The American Prospectors' Club of Los Angeles planned to meet October 12 at the Inglewood Recreation Center to view a film "California and its Resources." The monthly meeting was scheduled October 14 and Miss Fran Campbell was to tell of her recent trip to New Mexico.

President Addison Avery of the Chicago Rocks and Minerals Society was scheduled to deliver his popular lecture on the aborigine's use of stone and metal at the Society's October meeting. He was to appear in full Indian regalia and display and describe specimens from his large collection gathered from 28 states—artifacts of arrow and spear heads, knives, scrapers, drills, axes, celts, digging tools, pipes and ceremonial objects. He was to describe the methods by which Indians obtained raw stone material and the method of making the artifacts.

The San Fernando Valley Mineral & Gem Society planned to have its tenth annual Show at Victory Van Owen Playground, October 23 and 24. The Society recently celebrated its 15th anniversary.



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trations of minerals
in glowing colors.

The last field trip of the 1954 season for the Earth Science Club of Northern Illinois was scheduled October 17. The Gray Quarries at Hamilton, Illinois, was to be the destination to collect geodes. This trip was planned especially for the ladies so that they could collect without climbing hills or wading creeks.

At the September meeting of the Gem and Mineral Society of San Mateo County of Burlingame, California, the president, Lloyd Mabie, using an ordinary slide projector and home movie screen, projected "live" transparencies, revealing exquisite line, form and color of thin rock slices. To do this, Mr. Mabie removed the customary slide holder from the projector and held

the transparent slice in place. The last transparency shown, with its three-dimensional inclusion and the extraordinary color and form of a modern art impression, particularly thrilled the members.

The San Antonio Rock and Lapidary Society of San Antonio, Texas planned to have a Show at the Witte Museum Auditorium October 30 and 31.

The fifth anniversary of the Compton Gem and Mineral Club, of Compton, California was scheduled to be celebrated, with all past presidents attending, October 12. A large birthday cake was to be served, with members participating in skits and other entertainment.

ANCIENT GEM STONE IS ALWAYS POPULAR

Alexandrite is a very interesting, and valuable gem of the chrysoberyl family and was named after Czar Alexander II of Russia owing to the fact that it was discovered in the Ural Mountains in 1833 on the day on which he became of age. This gem is pleochroic, or showing three colors, has a hardness of 8.5 and is composed of Beryllium oxide and aluminum and has a specific gravity of 3.5 to 3.8.

Chrysoberyl is found in pegmatite dikes and may be gray, greenish-yellow, yellow, brown or bluish green. A variety of chrysoberyl may contain inclusions like microscopic needles, which, when cut en cabochon, shows a marked chatoyance and is called "cat's eye." When properly faceted this strange characteristic appears very beautifully and the gem is much sought and valuable. From *The Voice*, monthly bulletin of the El Paso, Texas Rockhounds.

The Montebello Mineral and Lapidary Society of California is planning to purchase mineral identification cards with the society's name imprinted on them to be used for show cases. This will give a uniform appearance to the display. The society planned a field trip to the Santa Rosa mountains, to be led by Al Carter, October 3.

The Humboldt Gem and Mineral Society of Eureka, California, is pleased with the success of its first annual gem and mineral show. In two days an estimated 2,000 people visited the show. Percy Hollister and Glenn Nash are credited for most of the planning and work.

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100 grit	\$2.65	\$3.60	\$5.35	7.50	\$11.35
220 grit	2.95	3.95	5.90	8.25	12.50
320 grit	3.35	4.50	6.70	9.40	14.20
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Graded 400	1.09	.73	.57	.48
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10" wide, 5 ft. long—	2.00; 150-foot roll—	39.77
12" wide, 5 ft. long—	2.25; 150-foot roll—	47.70

Wet Rolls

3" wide, 10 ft. long—	\$2.00; 150-foot roll—	\$21.60
10" wide, 40 in. long—	2.60; 150-foot roll—	71.25

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6" 5 for \$1.00; 25 for \$ 3.90	8 for \$1.00; 25 for \$ 2.25
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10" 2 for 1.15; 25 for 11.00	3 for 1.00; 25 for 6.45
12" 2 for 1.65; 25 for 16.00	2 for 1.00; 25 for 9.45

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8" diameter by .032" thick 10.40	16" diameter by .050" thick 28.60
8" diameter by .040" thick 11.40	20" diameter by .060" thick 39.20
	24" diameter by .060" thick 50.60

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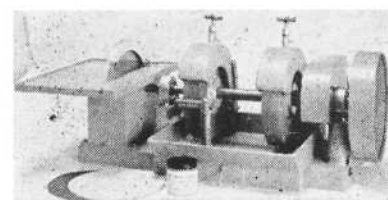
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GREENSTONE FOUND IN LIMITED FIELD

A mineral which Minnesota holds as a virtual monopoly is the Greenstone found in the vicinity of Ely. It is not a gemstone. It is a part of the oldest or basic earth forming rock in the Archeozoic era, the Keweenaw period. It is a part of the mineral rich Laurentian Shield extending out of Canada and into the United States.

The best guess is that it is more than 2 billion years old and came into being by extrusion in the form of a basalt. It still shows in its altered form a peculiar ellipsoidal shape to the amygdules which would indicate that the flow of lava solidified under the water of some long-departed Minnesota sea. The greenstone area has been traced for 70 miles in an almost unbroken line from Vermillion Lake to Moose Lake. The stone crops out on the surface in hills and ridges and typical specimens may be taken in the road cut on the west edge of the town of Ely.

People in many parts of this country are familiar with this material called "Ely Greenstone." It belongs in your collection as an example of the oldest rock in Minnesota—perhaps in the world. From the *Rock Rustler's News* the monthly bulletin of the Minnesota Mineral Club.

A pot luck supper and meeting was planned October 11 by the Twentynine Palms Gem & Mineral Society, with a special invitation to Marine personnel in that area to attend. Rocks found on summer trips by the members was to have been the discussion of the meeting. A field trip four hours from Twentynine Palms was scheduled October 16-17.

Dr. Robert Berg, head of the Geology Department of the University of Wichita was scheduled to speak on the geology and minerals of the area and mining history, at the October 24 meeting of the Wichita Gem and Mineral Society.

A film on Alaska was shown to members of the Coachella Valley Mineral Society in October. A future field trip to a nearby fossil area was described by Gaylon Robertson, field trip chairman.

Fossil mammals of the Santa Fe, New Mexico area was to have been the topic for discussion led by Ted Galusha of Espanola at the October meeting of the Santa Fe Gem and Mineral Club. Mr. Galusha is a noted collector of fossils and worked for the American Museum of Natural History in New York.

The manufacture and identification of synthetic gems was to have been the discussion led by Ken Stewart of the Stewart Gem Shop at the October 21 meeting of the Wasatch (Utah) Gem Society at the Forest Dale Club House.

Dr. Frederick Pough of New York, well known mineralogist, gem authority, and author presented an illustrated lecture to the Colorado Mineral Society in October. Dr. Pough was a staff member of the American Museum of Natural History in New York for 17 years as Curator of Mineralogy. A new gem mineral brazilianite, a yellow phosphate first found in Minas Geraes, Brazil, was his discovery and he also is the author of the popular "Field Guide to Rocks and Minerals." Dr. Pough is now doing research on artificial coloration of diamonds and other gems by cyclotron bombardment.

Residents of Coachella Valley, California, have long been wanting a museum and plans are now under way. David MacKaye and the Community Council for Adult Education have plans for a building to be located in the County owned property called Patton Court, located next to the fairgrounds in Indio. One of the night classes at the high school is starting to work on the larger display to be housed in the museum: a panorama to eventually extend from Santa Rosa peak to the Joshua Tree National Monument. From the *Lik'n Lap*, monthly bulletin of Coachella Valley Mineral Society.

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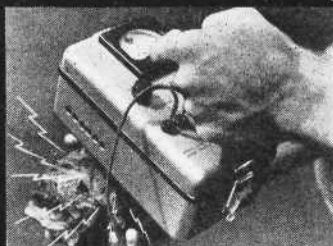
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Nearly a hundred members and friends of the Shadow Mountain Gem and Mineral Society of Palm Desert, California, enjoyed a potluck dinner October 1, at the Palm Desert Community Church. John W. Hilton, well known artist, author and explorer of the desert, entertained with several songs, accompanying himself on the guitar. One of the songs he sang was his own composition, "The Forty-Niner" adopted as the official song of the Death Valley '49ers. Mr. Hilton gave an interesting talk illustrated by colored slides describing a trip he had taken into Mexico in search of a lost amethyst mine.

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STONE-CUTTING BROUGHT FOOD TO ABORIGINES

To the rockhound, rock means potential cabochons or faceted gems, but to the Indians of California, it meant life itself. The Paiutes used rocks to a greater advantage than did other tribes. To them rocks used in grinding allowed them to make food of seeds, acorns, nuts and dried meat. The Paiute used stone to obtain some of his game. The weapon was made of obsidian (volcanic glass).

Steatite was used for beads, which along with small shells were worn for ornaments and used for cash. The Steatite beads were thick disks, about one-third of an inch in diameter and one-fourth inch in height. These were strung on buckskin. Obsidian splinters were used as drills for making holes in these disks, and in the shells. Obsidian was also used to make holes in buckskin so it could be laced or sewed into garments. Excerpts from an article by John W. Dixon in the Fresno Gem & Mineral Society's monthly bulletin *Chips*.

LEGENDARY STONES OF THE ANCIENTS

Scarabs are a familiar form of modern jewelry with an ancient origin. The shape is that of a beetle which in ancient times was to have been the means by which the sun was propelled across the sky. Ancient scarabs are made from carnelian, amethyst and clay.

Modern scarabs are not expensive and neither are they difficult to make—except in harder stone. In serpentine, ricolite, catinite (pipestone), or soapstone they can be worked with the simplest tools. Grind or shape en cabochon whatever size you may choose. In soft stone a tiny steel motor drill or burr will cut the lines of the design. This may even be done with a hand tool and a small amount of patience. In harder stone a diamond drill or point should do the work.

Scarabs have been in style for over 5,000 years. A pair in earrings, a pin or a ring will not only bring you right up to date—but according to the ancient Egyptians—a bit of luck as well. Reprinted from the Minnesota Mineral Club bulletin *Rock Rustler's News*.

The field trip of the Compton Gem and Mineral Club, of Compton, California, for October was scheduled to be at the Black Mountain, north of Hinkley, October 30 and 31. Material to be collected, nodules, geodes and opal. Gerald Backus was to be field trip chairman.

Big Bug Creek, a two hour drive from Phoenix, was the field trip planned by the Mineralogical Society of Arizona October 24. November 5, members planned to display their collections at the Arizona State Fair.

Rockhound

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As on desert trails we roam
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The Seventh Annual Show of the Hollywood Lapidary and Mineral Society planned October 9 and 10 was to be held at Plummer Park, Hollywood, California. Catherine Clarke, a graduate of the Chicago Art Institute, was to paint rock formations and picture agates during the show. Grab bags and a Cherry Tree, with gifts of earrings, gem stones and trinkets wrapped in red cellophane paper, to be drawn during the show were to be featured.

The Santa Barbara Mineral and Gem Society, of California, planned to have Professor C. Douglas Woodhouse of the University of California, Santa Barbara College as speaker October 6. The talk was to be on "Minerals of Butte, Montana and Coeur d'Alene district, Idaho. He was to show specimens of this area.

Charles Gritzner of Mesa, Arizona, has announced that after four years of service as a guide in the remote regions of Arizona, he is going to discontinue his guide service

and devote his time entirely to his business of selling minerals and prospecting equipment.

The Third Annual Gem and Mineral Show was planned by the Cedar City Rock Club of Cedar City, Utah, October 1 and 2. The show was to be displayed in the lobby of the College of Southern Utah memorial fieldhouse. Colored slides were to have been shown on two outstanding field trips and fluorescent rock exhibits were to be featured.

The Hemet-San Jacinto Rockhounds plan to open a class for juvenile enthusiasts to be devoted particularly to Indian artifacts. The club held its October meeting at the home of the Misses Francis and Martha Wilcox with 24 members attending. Colored

slides presented by Webster Parker were entitled "Earth is Born," from Life Magazine. The club planned a field trip to Searles Lake gem and mineral show at Trona.

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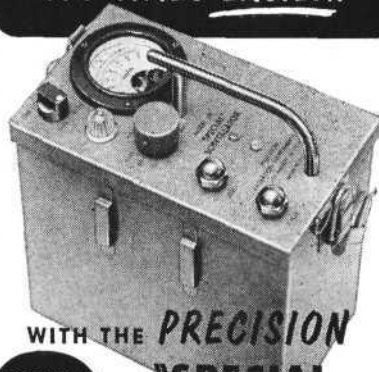
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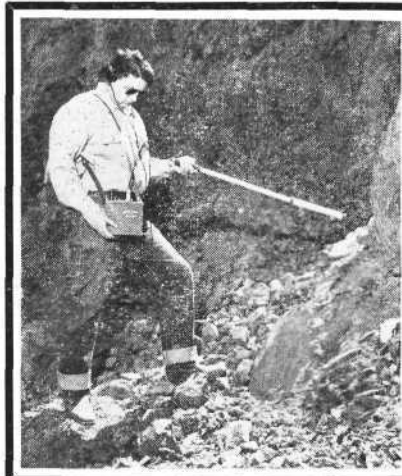
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12"		22.26	18.53
14"		29.40	25.67
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18"	65.60	43.20	36.12
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**TWO RARE MINERALS MAY
CONFUSE COLLECTORS**

Members of the Minnesota Mineral Club are having difficulty in defining the difference between Thomsonite and Mesolite. The monthly bulletin of the Club, *Rock Rustler's News* quoted an article published by N. H. Winchell in 1898:

"Thomsonite—The characteristics of this mineral are somewhat different from those of mesolite. It is not known to possess those peculiar cat's-eyes markings; its fibers

are coarse, and the cavities in which it is found are large and of irregular branching shapes as compared to the round or oval masses of mesolite. It is white and divergently fibrous. Its microscopic characters differ from mesolite in the spreading and often fern-like forms which the fibers assume as they radiate and develop from a common point.

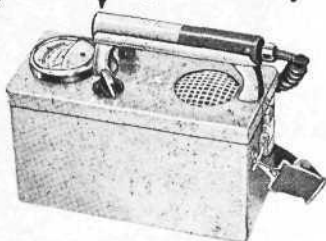
"Mesolite—the most collected zeolites in Minnesota. This mineral is usually white but varies from white to pink and to green, these colors alternating in superficial bands forming colored circlets or rosettes which with its hardness have rendered it a mineral gem. It is strongly radiated in fine fibers which are long and rigid, differing from thomsonite, whose fibers are coarser and somewhat irregular in direction and shape.

The East Bay Mineral Society of Oakland, California, planned a field trip to Clear Lake October 23 and 24, where jadeite, green agate and quartz crystals were to be collected. On October 21, Robert Deidrick was to talk on Gold, demonstrating with actual panning of gold with participation by the membership.

The Cheyenne Mineral & Gem Society held its October meeting at the Carnegie Library. Dr. R. A. Houston of the University of Wyoming was guest speaker and told of trees filled with uranium worth \$150,000 that have been found in the uranium rush. In such discoveries the original tree has been replaced by uranium minerals while retaining the shape of the original tree. He exhibited a large sample of this phenomenon. There were 85 members and guests present at the meeting.

H. L. Zollars, the Editor of *The Voice*, the monthly bulletin of the El Paso Mineral and Gem Society of El Paso, Texas, has devised a way to stimulate interest in the study of gems and minerals by members of the Society. Each month he prints a quiz, the answers can be found in rock and mineral books. The first member who sends in the answers, with at least 13 out of 25 correct, receives a tumbled gem for each correct answer.

The Delvers Gem and Mineral Society of Bellflower, California met at the Ed C. Lewis School in Downey to hear Mr. Marion Spears of the Western Trails Museum talk on the Silverton, Colorado Mining District. His talk was illustrated with colored slides. He told of the early days in mining and gave details of assaying ore, the use of crucible and cupel and a 30-pound hammer for breaking up ore in the old days. The field trip was to be at Boron and Castle Butte for petrified wood.



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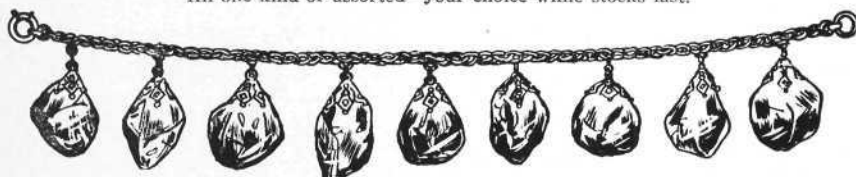
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AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

There seems to be some confusion about the rewards for finding uranium that we discussed in this space in October. Several persons have told us that they have found uranium and nothing ever came of it. It seems appropriate therefore to state again the terms upon which the Government rewards uranium finders.

The Government has established a three point program for rewards. They have guaranteed minimum prices for uranium ore until March 31, 1962. They have guaranteed a \$10,000 bonus for each discovery of 20 short tons of ore that will assay 20% uranium content. We wrote that a circular describing the new policy in detail is available without cost from the U.S. Atomic Energy Commission, Box 30, Ansonia Station, New York City.

We emphasize that the reward is not given for the mere discovery of uranium, so do not expect to get \$10,000 just because your geiger counter or other instrument offers evidence of uranium ore. Take the ore and have it analyzed for uranium content before you start spending the money. Geiger counters will click in thousands of places where it would not pay to mine the uranium bearing ores.

Since writing the article we learn that under the program the production of uranium has doubled in the last 18 months and the *Engineering and Mining Journal* recently stated, in a special report, that the recent activity marks the beginning of the greatest mining boom in American history. More than 8000 persons are now employed in the industry, about 1600 of them being employed in the processing plants. There are 550 producers shipping ore from the Colorado Plateau alone.

The government itself is drilling about a million exploratory feet a year while private enterprise is doubling that figure. A total of 461 properties has been certified as eligible for bonus payments and very nearly four million dollars have been paid under the program.

Next year 170 miles of access roads will be built at an estimated cost of \$2,500,000. Until June of this year the government had built 993 miles at a cost of nearly \$6,000,000.

While many deposits have been found on the Colorado Plateau it is expected that new discoveries will develop at a fantastic rate at many other spots. The newest hot spot is the Kern River country near Bakersfield, Calif. One department store in Bakersfield is reported selling 20 geiger counters a day. The sale of counters in the Los Angeles area has increased fantastically.

Perhaps the prospectors will make more money in the uranium boom than was made in the California gold rush but there's no thrill like seeing the stuff as you find it rather than hearing it—if your battery's working.

* * *

In the club bulletins that we receive from the east we find that many of the field trips are visits to local stone quarries and we never remember reading of a field trip to a stone quarry by a California club. Prob-

ably that is because there are so few stone quarries here. However there are many stone yards where rock is for sale from quarries all over America. B. W. Morant of Monrovia, Calif., writes that these places are prolific sources of nice and interesting specimens and if you live near a stone yard we suggest that you visit it and see what you can discover.

Mr. Morant writes that he thought the only rock of any interest in stone yards was the flagstone types from Arizona and Nevada but now he finds many ornamental stones from other states. "My first experience," he writes, "was when I needed a rock to take to my club's Christmas party. I did not have anything unusual to take along to the party for my donation and by chance I stopped at a stone yard in Pasadena. Upon looking around at the rocks displayed I came upon a cream colored rock that did not look very exciting at a distance. Upon examining it at close range however it contained more full size fossils than I have seen in a rock for many years. The yard man told me that he thought the material came from Texas, near Austin. (It was probably the turitella limestone from which Clay Ledbetter of Austin fashions his paper weights).

"I recently visited the yard again and this time I found some very nice blue-gray slate filled with iron pyrite crystals and I also saw some nice agate that was cuttable. The yard man said it came from Death Valley and that the slate came from Vermont."

We wrote an article one time about a field trip a society took in Portland where they examined the building stone in many of the important buildings in Portland and tried to identify the materials. Los Angeles is a poor place for such a field trip because so few buildings are made of beautiful stone due to rigid earthquake construction requirements and because the newer buildings are being made of terra cotta, concrete and other materials that are supposed to be more beautiful and more enduring.

However we doubt the enduring qualities. Too many modern architects forget that the only things our ancestors have left us from the ages before recorded history are our chromosomes and their lapidary work—the "seven wonders of the world," and all of them stone. They included the pyramids the hanging gardens of Babylon, the Colossus of Rhodes and other monuments. And then, more recently there were the Taj Mahal and the Great Wall of China. But the quarries are closing at many locations because of the diminishing demand for stone and the old time stone mason is disappearing from the scene.

Two years ago we visited the granite and marble quarries in Vermont and hauled home a souvenir chunk for our yard. But we understand that even those quarries are just about holding their own despite the increasing population because modern cemeteries have abandoned stone memorials and so many public monuments are being made from prosaic and unromantic concrete.

Mr. Morant has projected an interesting thought however. A visit to a stoneyard may prove very rewarding.

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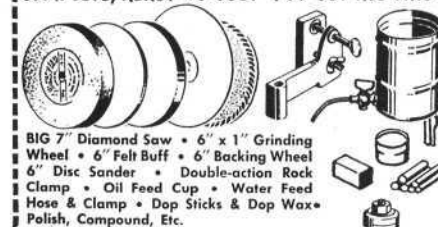
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WORLD'S MINERALS

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By RANDALL HENDERSON

FOR MANY YEARS I have been one of those who opposed the efforts of the Western Mining Council to have California's Joshua Tree National Monument thrown open to prospecting and mining. I share the view of other conservationists, that there are certain scenic areas in the West where the natural beauty of the land should be held inviolate against commercial exploitation—and that Joshua Tree Monument is one of them.

But now—when another issue is involved—I find myself in complete accord with the policy of the Mining Council. I refer to the recent announcement that the U.S. Navy is about to establish a gunnery range of approximately 900,000 acres in Saline Valley in Inyo County, California.

The Mining Council has joined forces with the Inyo Associates in opposing this latest invasion of desert lands by the armed forces. They are planning to ask for a congressional investigation, not only of the Saline Valley proposal, but of the entire program of naval and military usurpation of public and private lands.

Many millions of acres in California, Arizona, Nevada and New Mexico have now been closed to all travel, either recreational or commercial, and posted with "No Trespass" signs. The alarming fact is that these military reservations continue to expand in peace time no less than in war time.

It appears that the army, the navy, the marines and the air force each insists on having its own private hunting grounds—even though in some instances the actual use of the terrain for target purposes is limited to a few days in the year.

No one would want to deny the armed forces the range they actually need for necessary gunnery or bombing practice. But the various branches of the armed forces are notorious for their lack of coordination at times—and some of us would be interested in knowing, for instance, why an aerial gunnery range is needed in Saline Valley when it is but a few minutes' flight to the vast Tonopah gunnery range.

I do not know just how these transfers of public land to military reservation are brought about, but I presume they are accomplished by a few inter-office telephone calls and memoranda in Washington. I can imagine one of the generals or admirals looking over a big map of western U.S.A. and spotting an area with no towns and lots of white space—then sending to the Department of Interior a requisition for a 500,000-acre bombing range. Of course things are never quite that simple in Washington. But it is certain these reservations are established by agreement between officers and civilian personnel who have little knowledge and no interest in the rights and desires of American citizens who will be penalized. No public hearings are ever held, and no opportunity given for organized opposition.

Perhaps it is time we should start writing letters to our Western congressmen, asking them to go over to the Pentagon and explain that there are now over two million Americans making their homes on the Great American desert, and another ten million who have a recreational or commercial interest in desert terrain.

I agree with the Inyo Associates and the Western Mining Council—it is time for a congressional investigation of the high-handed manner in which desert terrain is being usurped by military and naval personnel without regard for the interests of the American citizens involved.

* * *

Speaking of conservation, we have a practical problem to solve at our Palm Desert home. We seeded the patio with clover, and then Cyria planted petunias, stocks and snap-dragons around the lawn. The jackrabbits which come in on their nightly foraging expeditions, like clover—but they like petunias better. Cyria replanted them once—and now the rabbits have devoured the second planting.

Yes, I know about the remedies—shotguns, poison, wire fences and all that. But Cyria likes rabbits no less than petunias, and wouldn't harm one of them for the world. And wire fencing is ugly—and a nuisance.

The rabbits haven't bothered the stock and snap-dragons—and that seems to suggest the answer; plant flowers which are less appetizing to rabbits than clover. It is sort of a trial and error method. If anyone knows a better answer we are interested.

* * *

One of our backyard visitors everyday is a roadrunner which comes in to our drip fountain for water. I was especially interested in Edmund Jaeger's story of *el paisano*, as the Mexicans call him, in this issue of *Desert*.

For years there has been controversy in some parts of the desert area as to whether or not the roadrunner should have the protection of state laws. Some of the sportsmen favor killing off the birds on the ground that they eat the eggs of quail and other birds which nest on or near the ground.

Dr. Jaeger knows more about these birds than most people, and when he says they deserve protection I believe him.

The impulse to kill, except in self-preservation, is a barbaric thing—and the degree of a man's enlightenment may be measured very accurately by the extent to which he lives by the creed: "Live and let live."

The late Aldo Leopold once wrote: "The thing which is missing (in our civilization) is love; some feeling for, as well as some understanding of, the inclusive community of rocks and soils, plants and animals, of which we are a part."

BOOKS of the SOUTHWEST

LEGENDS AND FOLKLORE OF OLD GHOST TOWNS

"What might have happened had California's mountains contained no gold is one of the great 'ifs' of history," writes Remi Nadeau in *The Ghost Towns of California*. But the gold was there and it brought steamboats, railroads, telegraph lines, commerce, finance, agriculture and industry to make California one of the leading states in the nation.

Remi Nadeau in his collection of western folklore, compiled for *Fortnight Magazine*, takes the reader on a fascinating tour of the old mining towns starting with Coloma where the first surging excitement of the gold rush started, to the last big gold rush in Death Valley's Harrisburg Flats. The stories are short, descriptive and filled with amusing incidents. Grass Valley, Nevada City, Downieville, Feather River, Old Shasta, Placerville, Cerro Gordo, Panamint, Bodie, Old Calico and Siskiyou are but a few of the ghost towns presented. How these teeming, roaring towns finally faded into deserted and empty ghost towns makes enjoyable reading.

Published by *Fortnight Magazine*, 68 pages. Illustrated with Woodcuts, Paperbound, \$2.50.

LIFE ON THE PRAIRIE WHEN BUFFALO ROAMED

One hundred and ten years have passed since Josiah Gregg first published *Commerce of the Prairies*, a scrupulously accurate guidebook to prairie travel, living and commerce.

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A sensitive scholarly man, Josiah Gregg joined a caravan of traders bound for Santa Fe in 1831 and soon developed a fascination for prairie life. And during the 10 years he engaged in Santa Fe trade, he took copious notes on the life and landscape of the American prairies.

He covered a wide field, geography of New Mexico, the Indians, early New Mexico history, botany and zoology and life as it was for the people.

Published by University of Oklahoma Press. Many original half-tones and maps. Gregg's bibliography. 469 pages. \$7.50.

TALES FROM A FAMOUS OLD MINING CAMP

As Lucius Beebe and Charles Clegg point out, *Legends of the Comstock Lode* is not a new contribution to the literature of Virginia City in its golden noontide, but rather an anthology of all the best liked stories of that period. So many of them are in one book or another, often hard to obtain by the eager scholar of Western Americana.

Here are ten chapters on episodes and people during the glorious time of Virginia City and Nevada when the Lode was running high, written in an easy, informative manner with all the hurrah of that period.

The reader will enjoy them all — from Adolph Sutro, who, after thirteen years of battle, finally saw his dream of the great Sutro tunnel come true — to the first night at John Piper's splendid Opera House on top of the mine-shafts of the Comstock.

Included are many photographic views of the Comstock, both past and present, which add to the vitality of the book. Lucius Beebe and Charles Clegg are well versed in the lore of the West — carrying on as they are *The Territorial Enterprise*, famous frontier newspaper.

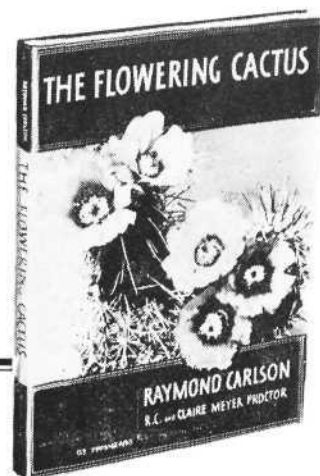
Published by the Stanford Press, Stanford, California. Paperbound, 76 pages. \$2.00.

Written by Leonard J. Arrington, associate professor of economics, the

Utah State Agricultural College, has published a monograph, *Orderville, Utah: A Pioneer Mormon Experiment in Economic Organization*. The monograph is an excellent presentation of a Utopian project which lived 10 years, had some degree of success, and then was dissolved as a communal organization for the same reasons that all such schemes have failed — the inequality in the productive capacity of human beings.

• • •

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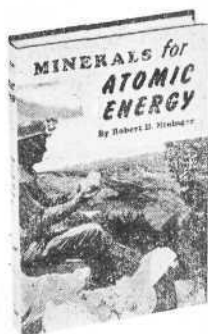
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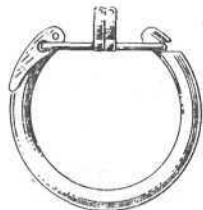
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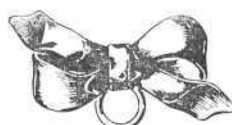


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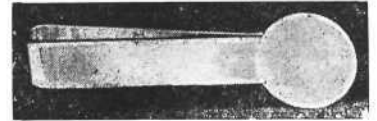


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Sterling Silver or Gold Filled \$1.25 doz.

Copper Plated 80c doz.—\$8.00 gross

Gold Filled Wire for Baroque Gems

15 ga.—5 ft. \$1.60

18 ga.—10 ft. \$1.95

20 ga.—10 ft. \$1.30

22 ga.—10 ft. \$1.00

24 ga.—10 ft. \$.75

26 ga.—10 ft. \$.60

**We Stock a Complete Line
of Copper Jewelry Parts**

Please add 10% Federal Excise Tax to all items listed except G. F. Wire and Copper Items
California Residents Add 3% Sales Tax—Postage Extra

OUR STORE IS COMPLETELY AIR CONDITIONED

GRIEGER'S • 1633 E. WALNUT ST. • PASADENA 4, CALIFORNIA

OUR STORE IS OPEN EVERY DAY EXCEPT SUNDAY FROM 8:30 TO 5:00. PHONE SY. 6-6423